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## THE COURSE OF LOGICAL POSITIVISM

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### I. The Origin and Growth of Logical Positivism

In 1922, there began at the University of Vienna a seminar led by the physicist-philosopher Professor Moritz Schlick. The membership of this seminar group was, in large measure, composed of "amateur" philosophers. They were men whose main or original specialization lay in other fields of knowledge. The original members included, to mention a few, Victor Kraft, a historian; Hans Hahn, a mathematician; Felix Kaufmann, a lawyer; Otto Neurath, a sociologist; and Kurt Reidemeister, a mathematician. And among the numerous visitors who swelled their ranks were such men as the Prague physicist Philipp Frank and Alfred J. Ayer of Oxford.

These meetings quickly came to life in 1926 with the arrival of Rudolf Carnap. His *Logische Aufbau der Welt*—and also Ludwig Wittgenstein's *Tractatus Logico-Philosophicus*—were full and precise statements of the early philosophizing of this group and the basis of long discussions. Out of these two works came the first real philosophical position of logical positivism.

During the course of these meetings, it was suggested that a name be adopted for the group in order to lend a pleasant aspect to their purposes and to connect them with the quiet university life of Vienna. The name adopted accomplished all this and even more, when the nucleus of this new movement became known as the Vienna Circle. Thus in the borderland of German idealistic influence emerged this modern form of empiricism.

In 1936, however, the meetings ended abruptly with the assassina-



tion of Professor Schlick by a former student. But the new philosophy, which had its beginning here, did not end with the Vienna Circle. Other movements, in Europe and America, followed; and the philosophy of logical positivism, with its great attraction for men of science, continued to grow with the scientific spirit of the age.

Perhaps nowhere today has the positivist movement gained greater momentum than in the United States. This is due, in part, to our own philosophical background and, in part, to the anticultural and anti-semitic policies of Nazism which caused the emigration of several of the leading figures in the movement to this country. Among the group were Rudolf Carnap, Hans Reichenbach, Philipp Frank, Richard von Mises, Herbert Feigl, and Carl Hempel. The influence of these men has indeed been wide, stemming, as it does, from many of our major Universities—Chicago, California, Harvard, Minnesota, and Princeton.

Logical positivism, however, is not something entirely new in the history of thought. Insistence on experience and the experimental trial-and-error method has characterized many a philosophical position. In antiquity, we find the Sophists, Stoics, and Epicureans; in the Middle Ages, the nominalists. Modern times have witnessed a greater development of this line of thought, with Bacon, Hobbes, Locke, Hume, Bentham, J. S. Mill, and Spencer in England and, in France, D'Alembert, Saint-Simon, Comte, and Poincaré.

Of this group, David Hume seems to have played the most significant role in the genesis of modern positivism. At least two conclusions of his empirical hypotheses bear close resemblance to common positivist tenets; namely, that the sphere of deductive reasoning is closed to statements about matters of fact and, secondly, that factual statements can ultimately be reduced to statements concerned solely with sense experience.

Auguste Comte, although of the "positive" family, does not bear the close ties of kinship with the modern movement that one might suspect. Any transempirical philosophy, for Comte, had simply outlived its usefulness. Consequently, the only "positive" sciences are

<sup>1</sup>C. S. Peirce, "How To Make Our Ideas Clear," *Collected Papers*, Vol. 1: *Principles of Philosophy*, ed. Hartshorne and Weiss (Harvard Univ. Press, 1931), Pars. 400

and 402.

<sup>2</sup>William James, *Pragmatism* (New York, 1912), pp. 53 and 200.

<sup>3</sup>*Ibid.*, p. 201.



mathematics, astronomy, physics, chemistry, biology, and sociology. There is a gap between these six basic sciences, however, which eliminates the possibility of a "unity of science." Since the logical positivist insists that *all* scientific statements can be reduced to statements of sensations, it appears that he is closer to British empirical thought than to French materialist speculation.

The United States, too, has had a history of empiricism. Positivism found rich ground for growth in the soil tilled by pragmatism, instrumentalism, and operationalism. The writings of Charles S. Peirce and especially his essay, "How to Make Our Ideas Clear," gave great impetus to the philosophic movement of pragmatism in this country. The meaning of a statement, Peirce wrote, consists in the sum of its verifiable consequences. There could be no difference in meaning that did not make a difference in practice.<sup>1</sup> Peirce, moreover, like the contemporary British philosopher and scientist Bertrand Russell, combined this attraction for the empirical with a deep interest in symbolic logic—a combination that is the hallmark of logical positivism.

Peirce's close friend, William James, continued to develop the philosophy of pragmatism. In his *Pragmatism*, James stresses continually the relationship of a term's meaning to its "cash value in experiential terms."<sup>2</sup> A statement has meaning, then, if it has experiential consequences and these consequences constitute the very meaning of the statement. The truth of an idea, consequently, is a process, "the process namely of its verifying itself, its verification."<sup>3</sup> (For present purposes we omit a consideration of James's second criterion of meaning and truth, developed in his theory of the "will to believe.")

Other pragmatic theories followed that of James, the instrumentalism of Dewey and the operationalism of Bridgeman, all of which tied American philosophical thought more closely to the empirical.

How, then, may we describe the philosophy of contemporary logical positivism? John Laird's description is amusing but nonetheless true:

By positivism in its most general sense we mean the theory that if you want to know anything about anything, you must either make an appointment with one of the sciences or else be content

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to be cheated. Outside the sciences there is no information. The poets may beguile you or exalt you but they cannot tell you anything. Theologians may bewilder you, philosophers may rack you, and rhetoricians may soothe you. But none of them can tell you anything.<sup>4</sup>

The positivist, to stress the obvious, is a man completely devoted to science and the scientific method. History, he will argue, speaks for itself. For nearly two thousand years, from the time of Aristotle, progress and discovery in science were relatively slow and small. Then, in the sixteenth century, something momentous happened. Success became the order of the day, achievements multiplied, advances were made by leaps and bounds. The names of Copernicus, Francis Bacon, Galileo, Kepler, and Newton date the beginnings of the rich harvest of science.

In the centuries that followed, man was relieved of many of the burdens formerly imposed by space and time. Medicine prolonged his life and lessened his sufferings; mechanics and chemistry gave him a relative mastery over space and time; electricity gave him the light and force that a highly productive civilization needs; and now, at the beginning of the atomic age, there seems no end to what science can accomplish.

Because of this rich fruitfulness of science, the positivist concludes that scientific methods be required of *all* fields of human knowledge. In particular, philosophy must disengage itself from the sterile speculation of the past and must proceed along scientific lines. In short, the quite valid methodology of one discipline is quite invalidly demanded of all disciplines.

As the name "logical positivism" would imply, attention to mathematics and logic and emphasis on the linguistic aspects of traditional philosophical problems appear as indelible marks distinguishing logical positivists from the early empiricists. Positivism (systematically) approaches the problem of meaning by means of a logical analysis of language in distinction to the earlier and more psychologically orientated forms of empiricism, positivism, and pragmatism. This is the *logic* of logical positivism.

<sup>4</sup>"Positivism, Empiricism and Metaphysics," *Proceedings of the Aristotelian Society*, xxxix (1938-39), 240.

<sup>5</sup>*The Vienna Circle* (New York, 1953), pp. 23-24.



[Thus the coupling of sense perception and logic is what differentiates positivism from the older empiricism.] As Victor Kraft argues, the positivists have combined the insight into the a-priori nature of logic and mathematics with the empiricist tenet of validation by experience alone.<sup>5</sup> Previously, Kraft continues, most of the philosophers who recognized this a-priori nature were apriorists even with regard to knowledge of reality. Empiricists, on the other hand, failed to see this a-priori nature of logic and mathematics, holding that all knowledge and science are derived from experience as the sole ground of validity. The Vienna Circle restricted the empiricist thesis to factual knowledge. All factual knowledge, they maintained, is derived from experience and can be validated by experience alone. The core of empiricism was thereby preserved. Though recognizing the a-priori validity of logic and mathematics, the early positivists did not veer toward some type of rationalism with respect to factual knowledge, since neither logic nor mathematics makes any *factual* assertions at all.

This last notion of nonfactual assertions (which the positivist calls tautologies or analytic statements) requires greater development, as it is essential for an understanding of philosophic positivism. Long before the Vienna Circle began its discussions, Immanuel Kant had focused attention on one important noetic fact which no succeeding philosopher could seriously deny. Kant saw clearly that the acquisition of empirical data would not be true human knowledge until it had taken on the forms of the categories. In other words, a perception of an existing other could not be rendered meaningful unless subsumed under some class or concept. Sheer empiricism consequently is impossible. In this sense Kant's famous dictum is not altogether erroneous; namely, that perception without concepts is blind and concepts without perception are empty.

For Kant, however, there is a structural necessity to think according to definite forms or categories. Kantian philosophy, as a consequence, petrified notions of Newtonian physics in its explanation of the space-time category. Positivists were fully conscious of this deficiency and endeavored to formulate a doctrine which would leave room for the evolution of science.

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Two philosopher-scientists, Ernst Mach and Henri Poincaré, disputed a solution to this difficulty. The question before them was, in essence, What are class notions? Considering the problem on the scientific level, they asked, "What are the general principles of science?" According to Mach, they are abbreviated economical descriptions of observed facts; according to Poincaré, they are free creations of the human mind which do not tell anything about observed facts.<sup>6</sup> An attempt to integrate the two concepts into one coherent system led to the development of logical positivism. For the positivist all class concepts and generalizations are pure constructions of the mind. They are neither real and objective nor a-priori determinations of the mind; they are merely arbitrary conventions about how to use some words or expressions. They function as tools of the mind to aid in the correlation of sense data. But such constructions may have factual import, according to positivists, provided they in no way refer to what is, in principle, beyond sense observation. In brief, the whole *content* of class must be empirical.

This whole positivist scheme offered much more possibility of synthesis and unity than the older form of empiricism. By adding the device of logic and mathematics, it brought about some manageable control of empirical data. In contrast with pragmatism and operationalism, positivism formulated its criteria of meaning in a strictly logical way, which satisfied the rigid requirements of a formal science. These were undoubtedly strong reasons why professional scientists and logicians were drawn to the philosophy of positivism.

What, then, did philosophy become on positivist terms? Philosophy could be no more than the mental activity of classification of ideas. It is logical analysis; that is, a clarification of the language used in everyday life. In short, philosophy became logic. Numerous centers of positivism have arisen, all embodying this conception of philosophy. In the United States we find the schools of Carnap, Frank, and Reichenbach, and the Chicago school of Charles W. Morris; in England, there is the Cambridge school, divided into groups under Russell and Wittgenstein; and finally the Oxford school of Alfred Ayer.

<sup>6</sup>Philipp Frank, *Modern Science and Its Philosophy* (Cambridge, 1949), pp. 6-9.

<sup>7</sup>Cf. B. A. Farrell, "An Appraisal of Therapeutic Positivism," I, *Mind*, LV (Jan-

uary, 1946), 25-48; "An Appraisal of Therapeutic Positivism," II, *Mind*, LV (April, 1946), 133-50.

It was Wittgenstein, however, who was the first to emphasize that the traditional problems of philosophy are nothing but verbal problems. The school of philosophic method under his leadership at Cambridge, called "therapeutic positivism," maintains that philosophy is not a discipline aiming at some superior type of knowledge or intellectual discovery but only a method of revealing the linguistic confusions that gave rise to philosophical problems and of solving those problems simply by showing there were no genuine problems to begin with.<sup>7</sup> It is undoubtedly due in large measure to Wittgenstein that we find the positivist preoccupation with semantics (an analysis of the meaning of terms and expressions) and with syntax (the formal analysis of sentence structure).

No matter what the predominant influences, the friendly little discussion group called the "Vienna Circle" set in motion a new movement of empiricism which spread throughout Europe and the United States.

## II. The Decline of Logical Positivism

The problem of *meaning* is undoubtedly the most important and most widely debated topic in positivist circles today. For an understanding of the positivist's stand, moreover, his view of *meaning* is basic, for on it depends the sum total of his philosophical tenets and conclusions. Since the "principle of verifiability" signifies an essential generalization of this view, a critical analysis of the verifiability principle seems the tool most apt for evaluating the philosophy of contemporary positivists.

The positivist, we noted previously, stands in awe of the luminous achievements of modern science. As a result, he claims that all questions of fact, of whatever branch of knowledge, can be decided by the empirical methods of science alone. [So with regard to the general concept of *meaning*, he infers logically that the meaning of a statement is the method of its verification.] This is the verification principle in its simplest form. Whether the individual positivist wishes to equate verification with the meaning of a statement or simply to make it the test of meaning will make little difference in practice. His two

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chief problems concern the question of *meaning* and the question of verification. The former asks under what conditions a sentence has meaning; the latter, how we discover whether a sentence is true or false. The second question presupposes the first and, in a certain sense, there is only one answer to both problems. For, from a positivist's view, to know what it would be for a sentence to be true is to know its meaning. And if the truth-conditions be impossible even to imagine, the sentence is simply meaningless.

There is a further notion, however, which is essential for an understanding of the verification principle; that is, the distinction between practical verifiability and verifiability in principle. All positivists insist that verifiability is not a matter of the physical possibility of verification, much less of actual verification. Rather, verifiability refers only to the *logical* possibility of observation. To determine meaningfulness, one need only be able to conceive of observations that would confirm or deny a proposition. The statement "Rivers flow uphill" may be physically impossible to verify, yet it is logically possible or verifiable in principle and hence meaningful.

What has been said so far concerning the verification principle is general enough and would be agreeable to positivists of all shades and hues. But since positivists determine the meaning of reality-sentences by their verifiability, the exact formulation of the verification principle is going to be of the utmost importance to them. And it is here that differences of opinion begin. For purposes of analysis we shall indicate the qualifications and revisions of this principle, made on the positivists' own seeing, to determine whether or not such a criterion of meaning is the panacea of philosophical ills it is made out to be. Alfred J. Ayer's formulation of the principle will merit extensive consideration. For, in Ayer, there is the self-acknowledged influence of Berkeley and Hume, of Russell and Wittgenstein, and particularly of the members of the Vienna Circle. His *Language, Truth and Logic*, furthermore, was the first clear and full presentation by an English writer of common positivist doctrines and, in addition,

<sup>8</sup>"Meaning and Verification," *Readings in Philosophical Analysis*, ed. Feigl and Sellars (New York, 1949), p. 148.

<sup>9</sup>*Language, Truth and Logic* (New York, 1940), p. 37.

<sup>10</sup>"Problems and Changes in the Em-

piricist Criterion of Meaning," *Revue internationale de philosophie*, ix (1950), 46.

<sup>11</sup>"Symposium: Verifiability," *Proceedings of the Aristotelian Society*, Suppl. xix, 126-27.



offers a detailed and revised account of the verification principle.

In general terms, the verification principle may be stated as follows: A sentence is factually significant if, and only if, some observations would be relevant to its truth or falsity. Sense experience alone, then, constitutes factual meaningfulness, and positivism is clearly just a modern version of the old theme of empiricism.

The original and most familiar statement of the verification principle was given by Professor Moritz Schlick in this form: "The meaning of a proposition is the method of its verification."<sup>8</sup> Schlick's views can be considered embryonic—the first, rudimentary contentions upon which the original logical positivists' speculations were built. The difficulty with Schlick's criterion, as argued by positivists, was that it demanded conclusive verifiability as a test of meaning—that is, a proposition could be said to be meaningful only if its truth could be conclusively established in experience.

The main reason for the positivist rejection of conclusive verifiability is that it rules out all propositions of universal form and thus all statements expressing general laws. [General propositions, Ayer explains, by nature cover an infinite number of cases and no finite series of observations could possibly establish them with certainty.<sup>9</sup>] Consequently, if conclusive verifiability is upheld, general propositions must be regarded as pieces of nonsense. But propositions of universal form constitute an integral part of scientific theories, argues Carl Hempel, who therefore rejects Schlick's criterion as overly restrictive.<sup>10</sup> F. Waismann is in substantial agreement with both Hempel and Ayer but adds that conclusive verifiability must be abandoned not only because of the unlimited number of tests involved but also because of the "open texture" of the terms themselves; that is, the possibility of some totally new experiences or of new discoveries affecting the interpretation of presently accepted facts.<sup>11</sup> All these same arguments, furthermore, would apply to a substitute criterion advanced by Karl Popper, the criterion of complete falsifiability.

Thus Professor Schlick's criterion has been abandoned by present-day positivists. But the arguments traced above bring to light the definite relative notion that will be contained in any new criterion of meaning. As pragmatists assert, there can be no absolute truths,

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for the future may always change things. In like manner, positivists reject the very notion of "absolute," since they can admit only a relative confirmation, to a greater or less degree, of any factual statement whatever. Indeed, Neurath and Popper have argued for the substitution of *confirmed* and *unconfirmed* in place of *true* and *false*.<sup>12</sup> Carnap, too, has spoken against the notion of absolute, suggesting that the mathematical laws of probability replace traditional truth-values.<sup>13</sup> The absolute for the positivist is simply nonsensical.

So in light of the inadequacies of the early criteria, positivists were forced to reformulate the verification principle if it was to serve as a satisfactory criterion of meaning. Alfred J. Ayer, and more contemporary positivists with him, have adopted weak or inconclusive verifiability as that criterion.

A sentence is verifiable in a weak or inconclusive sense, Professor Ayer explains, not if its truth can be definitely established in experience, but simply if experience can render it probable. Employing this more liberal criterion, he states the new criterion of factual meaning of a proposition in question form: "Would any observations be relevant to the determination of its truth or falsehood?"<sup>14</sup> From Ayer's view, the meaning-dogma has been elevated to its throne and any statement that fails to meet its demands must forfeit its right to factual meaning. Of importance to note is that, by means of the verification principle, Ayer has segregated factual statements from all others. The residue will be made up of tautologies and nonsense.

Tautologies or analytic statements play an important role in positivist philosophy and must be considered at some length. The tautological purports to assert nothing of fact; it is purely a priori. Its whole function, according to Ayer, is to render explicit unsuspected and implicit implications of one's assertions and beliefs.<sup>15</sup> In short, the tautological makes for consistency in logical relationships. For this reason, tautologies are not pieces of nonsense but give us a special kind of knowledge. Precisely because they say nothing about reality, they cannot be confuted and are therefore certain.

Included in the tautological order are not only logic and mathematics but all class concepts and all universal ideas as well. The

<sup>12</sup>Kraft, *The Vienna Circle*, p. 149.

<sup>13</sup>*Logical Foundations of Probability* (Chicago, 1950), p. 177.

<sup>14</sup>*Language, Truth and Logic*, p. 38.

<sup>15</sup>*Ibid.*, pp. 79-81.

<sup>16</sup>*Ibid.*, p. 81.

positivist is neither a realist nor a Kantian in regard to class knowledge. Class notions have no objective validity whatever; nor are they products of some a-priori determinations of the mind to think according to certain categories. For the positivist, the only real is the empirical, and class concepts are free creations of the human mind—arbitrary conventions which serve as shorthand controls of empirical data.

The positivist explanation of class concepts, however, as complete and free creations of the mind, will not stand up under an analysis of knowledge. Very generally, there can be no object of the human mind which is absolutely and completely constructed by the mind without some initial point of departure in experience. Even mathematics must have some starting point in experience, though the slightest. And in such cases where there is partial construction, we are aware of this in reflection.

But more specifically, class knowledge as well cannot be simply and totally a matter of mental construction—there is always a datum, a given. For from a phenomenological view of knowledge, the mind *encounters* its object; it does not *make* it. Now, positivists claim that the given is merely sensory and nothing more. But no true human experience can be purely sensory; some nonsensory element is always included which categorizes the sense datum and renders it meaningful. To the extent that I am able to verify “This is an animal” by some perception, what I perceive must be “animality” in this. In other words, the datum includes a class, a universal. This would be basic no matter how the relationship of class and inferior is explained and no matter what the ultimate psychological and metaphysical explanation. In any case, with his rejection of this datum, the positivist can never offer an adequate explanation of the phenomenon of knowledge.

Now, Ayer and positivists in general, furthermore, insist that the tautological order is not only arbitrary and completely independent of experience but that it is also completely independent of the nature of the mind. There are absolutely no “laws of thought.” The laws of identity and noncontradiction, according to Ayer, are purely arbitrary conventions, valid in their own right, and do not even depend upon incorporation into a system.<sup>16</sup> In brief, they are

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valid by virtue of their form alone. It is perfectly conceivable to Ayer that we could have employed different linguistic conventions and that a hundred years from now men may think according to different rules. This is nothing else but intellectual suicide.

Ayer notwithstanding, man is capable of knowing being and the principles which necessarily follow upon being. In reflection he realizes that his intellect is moved to assent by the evidence of being; he realizes that being, the whole of reality, is the object of his knowledge and that this object is intelligible. By knowledge of being, then, man at least implicitly understands that "being is" and that "being cannot be and not be at the same time under the same respect." To this necessity *ex parte rei* there corresponds a necessity *ex parte mentis*. Since man's assent is determined by the evidence of being, the principles of identity and noncontradiction are absolute necessities of thought precisely because identity and noncontradiction are intrinsic necessities of being. These principles cannot be arbitrary conventions of linguistic use; they transcend language and have their roots in being itself. Human thought contrary to these principles is simply impossible.

In our analysis so far we have seen Ayer's criterion of factual meaning; namely, verifiability in principle. The tautological or analytic, though devoid of factual meaning, is nonetheless meaningful within its own framework. A genuine proposition—and this corresponds roughly to Hume's "relations of ideas" and "matters of fact"—is either a priori or empirical. Ayer concludes, then, that any statement which is neither analytic nor empirically verifiable is nonsensical. All metaphysical—that is, all nonempirical statements of existential import—are reduced to nonsense. The razor of verifiability has indeed cut away a good deal of the flesh of human knowledge.

On what grounds now does Ayer reject metaphysics as meaningless? On strictly metaphysical grounds. According to the verification principle, a statement whose validity cannot be tested by sense observation is nonsensical. The only real, consequently, is the empirical. The verification principle is itself a metaphysical statement concerning

<sup>17</sup>"Meaninglessness," *Mind*, XLV, 353.

<sup>18</sup>John Laird, "Positivism, Empiricism and Metaphysics," *Proceedings of the Aristotelian Society*, XXXIX, 218.

<sup>19</sup>"Aspects of Positivism," *Philosophical and Phenomenological Research*, XII (March, 1953), 382-83.

the nature of reality, a metaphysic of empiricism dressed up in twentieth-century clothes. To identify verifiability with verifiability by sense experience, to limit the real to the sensible, is an arbitrary assumption which begs the whole question of epistemology and metaphysics from the start.

Let us review the arguments of several philosophers who bring to light the arbitrary and metaphysical character of Ayer's antimetaphysical views. Dr. A. C. Ewing, first of all, asks how the positivist establishes the truth of his view that sense observation is the sole determinant of factual meaning.<sup>17</sup> This cannot be shown to be true even in a single case of sense experience, argues Ewing. For how could the positivist ever know by sense experience that there is not a part of the meaning of a statement which he simply cannot verify? And the fact that we do not have any sense experience of the part in question proves nothing, since the whole question is whether there is something in what we mean that transcends the empirical. But how could the positivist know by sense experience that there is not? At the outset, the verification principle must be an arbitrary limitation on the scope of human experience and a metaphysical assertion limiting reality to the empirical.

John Laird brings out essentially the same point in a variant argument. Any form of empiricism, Laird contends, is a metaphysic—a doctrine about ultimates, asserting that, for any human thinker, the only ultimates are contained in human *empeiria*.<sup>18</sup> Should the positivist deny he is asserting anything ultimate, he continues, there is still no way out. The positivist is caught between the horns of a dilemma: either he gives no reason for his insistence on sensory experience, and his doctrine becomes purely arbitrary; or he gives a reason which, on his own showing, is merely provisional and not ultimate. In that case, he would ostensibly be refraining from metaphysics out of policy but would covertly be admitting that there are ultimate reasons for his position. Positivists are not antimetaphysicians, then, but only metaphysicians in disguise.

Raphael Demos, finally, exposes the capricious nature of the positivist stand in a most emphatic way.<sup>19</sup> On the positivist's own principles, we recall, one does not challenge rules; they are arbitrary

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conventions valid in virtue of their form alone. Now, the positivist is the close friend of modern science and makes it clear that *this* is what *we mean* by evidence in science. All well and good, says Demos, but we mean something more by evidence in metaphysics. If rules are purely arbitrary and if the metaphysician does not adopt the rules of the scientist—as the positivist deplors he does not—by what right does he criticize the metaphysician for not conforming to the rules of the scientist? Why should he question the rules of the metaphysician at all?

The same general objection may be applied to the positivist doctrine of meaning. On what basis does the positivist determine the meaning of *meaning*? His only criterion is the linguistic usage of science. But, once again, the linguistic usage in metaphysics is that *meaning* does not mean the same as in science. Nonetheless, positivists criticize the metaphysician for not conforming to scientific usage, which, as Demos remarks, “is like scolding somebody for speaking French according to French grammar and contrary to English grammar.”<sup>20</sup>

Clearly, the verification principle arbitrarily limits evidence and meaning and rejects metaphysics because the principle itself involves a metaphysics. Indeed, the positivist cannot help adopting some theory of the universe, some world view, to serve as the foundation stones of his views on science, history, psychology, ethics, theology, and so on. The verification principle, however, in destroying metaphysics, necessarily destroys itself. It destroys itself precisely because it itself is a metaphysic and because it includes in the realm of nonsense the philosophical principles on which its own conclusions depend.

But let us return to Professor Ayer’s formulation of the verification principle. A statement has factual meaning, he argued, only if observations can be made which would be relevant to its truth or falsehood. But has any philosopher, to the most extreme sceptic or idealist, ever made a statement to the truth of which he did not think some observation or other was relevant? On the same point, Isaiah Berlin contends that *relevance* is not a precise logical category, realizing that

<sup>20</sup>*Ibid.*, 383.

<sup>21</sup>“Verifiability in Principle,” *Proceedings of the Aristotelian Society*, **xxxix**, 233.

<sup>22</sup>*Language, Truth and Logic*, pp. 38-39.

<sup>23</sup>*Ibid.*, pp. 11-12.



"fantastic metaphysical systems" are free to claim that observations are relevant to their truth.<sup>21</sup>

To avoid this difficulty, Ayer attempts another formulation of the verification principle. He states it thus:

. . . it is the mark of a genuine proposition, not that it should be equivalent to an experimental proposition [one which records an actual or possible observation], or any finite number of experimental propositions, but simply that some experimental propositions can be deduced from it in conjunction with certain other premises without being deducible from those premises alone.<sup>22</sup>

It is to be noted, first of all, that this formulation involves some inferential process. But how can Ayer know from sense experience alone whether an inference is legitimate or not? Surely not from logic or mathematics, for these sciences are tautological, saying nothing at all about reality—and presumably Professor Ayer is saying something of factual import. Since the principles of inference assuredly cannot be objects of empirical observation, how can Ayer determine the validity of any inferential process?

Perhaps a more embarrassing difficulty is that now the verification principle allows meaning to any statement whatsoever. Ayer himself admits this deficiency in the revised edition of *Language, Truth, and Logic*, giving the example,

. . . the statements "the absolute is lazy" and "if the absolute is lazy, this is white" jointly entail the observation-statement "this is white" and since "this is white" does not follow from either of these premises, taken by itself, both of them satisfy my criterion of meaning.<sup>23</sup>

To emend the difficulty by leaving out the part about other premises would exclude hypotheticals from the class of empirical propositions and, therefore, make nonsense of scientific theories. So Professor Ayer attempts to meet the difficulty by still another formulation of the verification principle. Though more lengthy and involved than the original formulation, it deserves quotation in full:

. . . a statement is directly verifiable if it is either itself an ob-

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servation-statement, or is such that in conjunction with one or more observation-statements it entails at least one observation-statement which is not deducible from these other premises alone; and . . . a statement is indirectly verifiable if it satisfies the following conditions: first, that in conjunction with certain other premises it entails one or more directly verifiable statements which are not deducible from these other premises alone; and secondly, that these other premises do not include any statement that is not either analytic, or directly verifiable, or capable of being independently established as indirectly verifiable.<sup>24</sup>

A statement has factual meaning, then, if it is either directly or indirectly verifiable.

It is interesting to note what positivists themselves have to say about Ayer's revised criterion. According to Carl Hempel, this criterion, like Popper's criterion of complete falsifiability, allows factual significance to any conjunction whatever. An explanation of terminology may be necessary to follow Hempel's reasoning. By *S.N.* he means the expression obtained by connecting two sentences by the word *and*—for example, "all swans are white and the absolute is perfect." Take the conjunction *S.N.*, where *S* satisfies Ayer's criterion, while *N* is a statement like "the absolute is perfect," which is to be rejected by the same criterion. Hempel points out, however, that

. . . whatever consequences can be deduced from *S* with the help of legitimate subsidiary hypotheses can also be deduced from *S.N.* by means of the same subsidiary hypotheses, and as Ayer's new criterion is formulated essentially in terms of the deducibility of a certain type of consequence from the given sentence, it countenances *S.N.* along with *S*.<sup>25</sup>

And Professor A. Church makes substantially the same point in his review of Ayer's second edition of *Language, Truth and Logic*.<sup>26</sup>

The verification principle becomes more and more suspect and Ayer

<sup>24</sup>*Ibid.*, p. 13.

<sup>25</sup>Hempel, "Problems and Changes in the Empiricist Criterion of Meaning," *Revue internationale de philosophie*, ix (1950), 50.

<sup>26</sup>*Journal of Symbolic Logic*, xiv (1949), 52-53.

<sup>27</sup>A. J. Ayer, *Language, Truth and*

*Logic*, p. 16.

<sup>28</sup>"Note on the New Edition of Professor Ayer's *Language, Truth and Logic*," *Mind*, LVII (Oct., 1948), 418.

<sup>29</sup>*Language, Truth and Logic*, p. 15.

<sup>30</sup>*Ibid.*, p. 16.

<sup>31</sup>*Ibid.*

himself hedges more and more. He tells us, you recall, that a statement is factually meaningful (nonanalytic), if, and only if, it is either directly or indirectly verifiable. But this becomes shortly, "Unless it [a factual statement] satisfied the principle of verification, it would not be capable of being understood in the sense in which either scientific or common-sense statements are habitually understood."<sup>27</sup> All that this means, however, is that unless a statement has the sort of verification a scientific or common-sense statement has, it will not be a scientific or common-sense statement. Thus John Wisdom amusingly writes that by an analysis of the verification principle we arrive at its complementary platitude, that "every sort of statement has its own sort of meaning."<sup>28</sup>

Indeed, on Ayer's own admission, this supposedly self-evident criterion of meaning is not all it seemed to be. To quote Professor Ayer:

In putting forward the principle of verification as a criterion of meaning, I do not overlook the fact that the word "meaning" is commonly used in a variety of senses, and I do not wish to deny that in some of these senses a statement may properly be said to be meaningful even though it is neither analytic nor empirically verifiable.<sup>29</sup>

And again:

It is indeed open to anyone to adopt a different criterion of meaning and so to produce an alternative definition which may very well correspond to one of the ways in which the word "meaning" is commonly used. And if a statement satisfied such a criterion, there is, no doubt, some proper use of the word "understanding" in which it would be capable of being understood.<sup>30</sup>

The verification principle, consequently, is quite incapable of eliminating metaphysics or anything else. And for this we have Ayer's own testimony:

. . . although I should still like to defend the use of the criterion of verifiability as a methodological principle, I realize that for the effective elimination of metaphysics it needs to be supported by detailed analyses of particular metaphysical arguments.<sup>31</sup>

A frank and honest admission, to be sure.

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Though difficulties with the verification principle have multiplied, many positivists, including Hempel, Frank, Stace, Feigl and Church, believe satisfactory solutions may still be reached by a systematic use of the logistic method. We ask the further question, then, whether, on positivist principles, a justification of this principle as a criterion of meaning is at all possible. Now, the positivist might offer either a-priori or empirical reasons to establish his position. But he is barred from giving any a-priori reason because, on his own saying, the a priori is a free creation of the human mind incapable of justifying any theory whatsoever. And he cannot even attempt to offer empirical reasons, since an empirical inspection of *meaning* is a logical impossibility contradicting the very notion of "verifiability in principle." If the verification principle cannot be justified in either of these two ways, it must be considered a purely arbitrary assumption.

To this line of reasoning the positivist might reply that his criterion is indeed arbitrary. He would explain that the criterion is an arbitrary convention about what *he* understands by *meaning* which, as such, required no justification. Very well. But if this is his stand, as Ewing remarks, the positivist is excused from having to prove his theory "only at the expense of admitting that there is no more reason for accepting it than there is for accepting any theory whatever."<sup>32</sup>

No, answers Professor Ayer, the verification principle is not supposed to be "entirely arbitrary" because unless a statement satisfied this criterion of meaning, it could not be understood as scientific and common-sense statements are.<sup>33</sup> But all that this means, as pointed out previously, is that unless a statement has the kind of verification a scientific or common-sense statement has, it will not be a scientific or common-sense statement. Granted, I say, but we are now a long way from the positivist's original announcement of the verification principle as *the* criterion of meaning, a universal criterion, capable of eliminating all metaphysics and of solving all outstanding philosophical disputes.

There is a more fundamental reason, however, which closes all avenues of justification to the positivist. From the start, positivism limits true knowledge (nonanalytic) to the correlation of observational data. The human knower cannot rise above the level of sensation. By

<sup>32</sup>"Meaninglessness," *Mind*, XLV, 351.

<sup>33</sup>*Ibid.*

<sup>33</sup>*Language, Truth and Logic*, p. 16.

what possible means, then, can the validity of sense knowledge be established? Sensation, by nature, does not carry with it its own justification. Because the senses are limited and conditioned by matter, with sense knowledge alone man could never make a complete retour and reflect back on the nature and validity of his act and faculty of sense. On his premises, the positivist can never hope to give a rational account of his theory.

More fundamentally still, the positivist can find no justification of the verification principle without appealing to metaphysics—and that a metaphysics of empiricism. To assert that the only true knowledge is reducible to sense is implicitly to assert that the only real is the sensible. This metaphysical assertion the positivist cannot and never attempts to prove. It is his initial act of faith.

Another more embarrassing difficulty, closely connected with justification, concerns the very meaning of the verification principle. On positivist principles, the test of a significant statement is that it be either analytic or empirically verifiable. Is the verification principle analytic? It hardly seems so, since the analytic says nothing at all about reality, and this principle certainly proposes to say a great deal about reality. Is it then an empirical hypothesis? But how is *meaning* capable, even in principle, of empirical observation? If it is neither an analytic nor an empirical hypothesis, the consistent positivist should reject his criterion of meaning as meaningless and hence self-defeating.

To this Professor Ayer has replied that the verification principle should be regarded as a definition, as a methodological principle of analytic character.<sup>84</sup> Now, according to the positivist, an analytic statement is freely and arbitrarily made. Even if the verification principle be granted meaning, then, it can only be a free and arbitrary assumption. Ayer's remark about the principle not being "entirely arbitrary" we have already considered. Future attempts to formulate a verification principle, even should they be successful to the extent of eliminating the logical difficulties, will all necessarily labor under this basic difficulty of justification.

This failure of positivism to provide anything but an arbitrary foundation for the verification principle would seem the underlying

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reason for recent positivist concern with metaphysics, understood in a broad sense.<sup>35</sup> Other factors also are responsible for the new positivist accent on "first philosophy." First, there appears a growing awareness among analysts that existential propositions possess, after all, a unique character which defies purely verbal analysis and which, consequently, can be handled only by a science of the real.<sup>36</sup> Secondly, the original positivist attitude of regarding propositions as independent entities is gradually broadening to admit a consideration of the mental act of judgment which finds expression in a proposition. In any case, though positivists have not formally embraced a metaphysic, they have at least tempered their denunciations of that science and are cautiously and slowly weighing its value and place.

A third factor, and a strong extrinsic impetus to positivists' second look at metaphysics, is the amount of criticism provoked by the emotive theory of values. Ethical judgments, according to positivists, do not state anything at all factual, but merely express a speaker's feelings and, as such, cannot be said to be either true or false. If, then, values are without reality, morals are without meaning. This can be the only conclusion for the consistent positivist—in destroying metaphysics, he necessarily destroys ethics. For if there is no meaning in things, at least none that "philosophy" can discover, then it is impossible to assign a *finis* to human existence; if the world that we know by our senses is the only real one, then questions concerning the nature and end of man simply cannot be discussed. Notions of God, immortality, and freedom are metaphysical and, consequently, meaningless.

In his most recent collection of essays, Professor Ayer avows the emotive theory of values as explained above to be an over-simplification. He qualifies in many ways his former statements and takes pains to deny that morals are trivial or unimportant,<sup>37</sup> that nothing is good or bad, right or wrong,<sup>38</sup> and that anything anybody thinks right is right.<sup>39</sup> With regard to freedom of the will, furthermore, Ayer will not assert that it is a mere illusion, for "to say that my behavior can be predicted is not to say that I am acting under constraint."<sup>40</sup>

<sup>35</sup>Gustav Bergman, *The Metaphysics of Logical Positivism* (New York, 1954).

<sup>36</sup>A. J. Ayer, *Philosophical Essays* (New York, 1954), pp. 215-30.

<sup>37</sup>*Ibid.*, p. 238.

<sup>38</sup>*Ibid.*, p. 245.

<sup>39</sup>*Ibid.*, p. 246.

<sup>40</sup>*Ibid.*, p. 284.



Thus while Ayer and positivists write on, one thing becomes apparent: the unqualified positivism of a decade ago is no more.

In summary, positivism has brought down more difficulties upon its head than the number of philosophical disputes it proposed to solve. It finds itself incapable of justifying its own tenets. It destroys metaphysics only by a metaphysics, thereby destroying itself. Even the very formulation of the verification principle as a criterion of meaning proves to be either too inclusive, allowing factual import to any statement whatsoever, or too exclusive, denying meaning to obviously meaningful statements and even to scientific hypotheses. And the implications of the verification criterion in the field of ethics are only too apparent to positivists themselves. If this most distinctive and most essential principle of logical positivism proves useless, positivism, as a philosophy of the real, can only die of frustration.

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## Chronicle

THE METAPHYSICAL SOCIETY OF AMERICA held its seventh annual meeting, March 23 and 24, 1956, at Fordham University. The meeting opened with a panel discussion of the relation of metaphysics to theology. The Reverend George P. Klubertanz, S.J., of Saint Louis University, in the opening paper, considered metaphysics as an autonomous philosophy of being, which yet historically profited from philosophically significant data of the Christian revelation. He also indicated that scientific theology used metaphysics as an instrument. Professor Raphael Demos of Harvard University maintained that there could be no ethics without religion, for religion to him is that part of human experience that is concerned with values and finality. Professor Paul Tillich of Harvard University maintained that metaphysics and theology are coextensive approaches to one and the same ultimate reality; metaphysics grows out of the same existential roots that theology views as the manifestation of God. The commentator, Professor Henry B. Veatch, of Indiana University, pointed the discussion to the differing views on the nature of both metaphysics and theology held by the panelists.

The presidential address of Professor Newton B. Stallknecht, of Indiana University, was entitled "The Quality of Man" and concerned itself with total responsibility; the commentator, Professor John Wild, of Harvard University, questioned the absolute value of commitment in itself, pointing out that there was an objective good to which the commitment ought to be made.

Shorter papers were given by George B. Burch (Tufts University), "The Problem of Universals in Philosophy of Education" (commentator, H. S. Broudy); Robert S. Brumbaugh (Yale University), "Metaphysical Systems and the Problem of Transformation" (commentator, George K. Plochmann); Beatrice and Sydney Rome (Rand Corporation), "Some Speculations on Intentionally Structured Systems" (commentator, William A. Gerhard); Andrew P. Ushenko (Indiana University), "The Form of Meaning and Being" (commentator, Irwin C. Lieb); I. M. Bochenski, O.P. (University of Notre Dame), "The Problem of Universals" (commentator, William Walton).

At the annual business meeting, the Reverend George P. Klubertanz, S.J., was elected president, Professor Henry B. Veatch secretary, and Professor Richard McKeon councillor. After Professor Veatch's resignation, Doctor Sydney Rome was appointed secretary.

## THE FREEDOM OF MAN IN PLOTINUS

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The following article is a textual analysis of the *Enneads* of Plotinus to determine whether Plotinus held man to be free and what he understands this freedom to be. My primary sources are Emile Brehier's *Plotin: Enneades* (6 vols. Paris, 1924), Stephen Mackenna's *Plotinus* (2 vols. Boston, 1916), and Grace H. Turnbull's *The Essence of Plotinus* (New York, 1948). My secondary sources are A. H. Armstrong's *The Architecture of the Intelligible Universe in the Philosophy of Plotinus* (Cambridge, 1940), William Ralph Inge's *The Philosophy of Plotinus* (2 vols. New York, 1929), and Philip V. Pistorius's *Plotinus and Neoplatonism* (Cambridge, 1952).

The philosophy of Plotinus is one of emanation and return. The emanation of the world is effected through the three Hypostases. The first of these is the One, also called the Good (*to En, to Agathon*). This is the supreme principle, the beginning and end of all being. Proceeding from the One is Mind (*Nous*), its first effect, which then knows the One. Mind comprehends in itself all intelligible forms of lower reality. The last Hypostasis is Soul (*Psychē*), the principle of activity, proceeding from the One and from Mind.

All other reality thus emanated seeks to be reabsorbed in the One as all effects desire (*epiētai*) the Good.<sup>1</sup> To understand Plotinus's conception of man's free acts and will, it will be necessary to know something more of soul and its nature in man, as well as of Plotinus's understanding of desire, virtue, and the various interpretations of freedom.

It has been said that Soul is the third Hypostasis. This Soul can be considered in various ways. First, it is the World Soul (*psychē tou pantos*) which contains in itself all the germinal principles of life.



Particular souls (*hekastou*)<sup>2</sup> emanate from this World Soul. These particular souls are either those of animals, immersed in matter, or of men. In man, the particular soul is compounded of a higher part which desires (*orexis* or *epheis*) the World Soul, and through this, Mind, leading to the One; and the lower part which has an affinity (*epithymia*) for matter, is mixed with it and makes possible sensation, appetite, and passion.<sup>3</sup>

Man, then, appears to be between the world of spirit and the world of matter. One author has put this mediate position of man in this way:

The individual, and particularly the human soul, seems for Plotinus to occupy an intermediate place between the lower and higher, or rather to contain both lower and higher in it . . . Individual souls never simply exist in and for the material world, are not completely bound up with it, though they are not as completely detached from the material world as the higher and universal soul.<sup>4</sup>

Man has, then, a complex soul. In its lower part there is no possibility of freedom since it is bound to a body and is moved by external circumstances, passions, and the senses.<sup>5</sup> The higher part, however, presents another picture. The soul, or at least some part of it, must of itself be free (*eleutheron*) because it is turned to Mind, which is itself free since it resides in the Good and is dominated by virtue which is also free.<sup>6</sup> Therefore, the Good emanating through all spiritual being releases the higher part of man, soul, from the complete bondage of matter. Dean Inge has—with emendation, since he tends to interpret Plotinus in too idealistic a context—well expressed what is here stated.

What is free in us is that spontaneous movement of the Spirit

<sup>1</sup>*Enneads*, III, 2, 3.

<sup>2</sup>In this paper when the reference is definitely to the Hypostases the word will be capitalized, otherwise the lower case will be retained.

<sup>3</sup>*Enneads*, III, i, 7, 8; *ibid.*, 2, 3; IV, 8, 13, *passim*.

<sup>4</sup>A. H. Armstrong, *The Architecture of the Intelligible Universe in the Philosophy of Plotinus* (Cambridge, 1940), pp. 90-91 (Selection cited from the *Enneads* is IV, 3,

12-18).

<sup>5</sup>*Enneads*, III, 1, 8.

<sup>6</sup>*Ibid.*, VI, 8, 6.

<sup>7</sup>William Ralph Inge, *The Philosophy of Plotinus* (New York, 1929), II, 132-34.

<sup>8</sup>*Enneads*, VI, 8, 1.

<sup>9</sup>*Ibid.*, III, 3, 4.

<sup>10</sup>*Ibid.*, 2, 4.

<sup>11</sup>*Ibid.*, VI, 8, 2 (literally, "reasoning with appetite").

which has no external cause . . . it is the will of the higher Soul to return to its own principle. The element of freedom in our practical activities is this underlying motive, the spiritual activity of the Soul. When the Soul becomes Spirit (Mind), its will is free, the good will (*boulēsis*), in attaining its desire, becomes spiritual perception (*noēsis*), and Spirit is free in its own right.<sup>7</sup>

Empirical investigation also reveals man's possibility of self-domination. Sudden action, necessity, or passion often compel man to act. This presents a contrast for other acts which he foresees and can refuse to posit.<sup>8</sup> Men are praised or blamed for certain actions, and it seems that they must in some way be responsible for them.<sup>9</sup> Nor do we ever see a happy man who has not earned his happiness by his actions.<sup>10</sup> It is clear, then, from Plotinus's own words indicated in the above loci that man has in his very nature the ability to posit free acts. But before this can be fully grasped, it is necessary to investigate and determine the meaning Plotinus assigns to certain terms.

In the foregoing analysis the term "desire" was used in a wide sense. To understand its place in Plotinus's doctrine of will, the various distinctions he gives it must be explained. There are in general three kinds of desire or appetite in Plotinus. The first, *hormē*, which he uses in a general sense for any natural inclination, enters little into the doctrine of will and can be dispensed with in this study. The second kind of desire is for an action, *orexis*. The third is *epithymia*, which he uses only in reference to the desire all beings have for the Good or Mind. Of these *orexis* enters most prominently into his doctrine of will.

A threefold division of *orexis*, or the desire for action, is given: *thymos*, the irascible desire; *epithymia*, the concupiscible; and *logismos met' orexeos*, the rational. This last occurs frequently in this discussion and will be translated as "rational desire."<sup>11</sup>

Plotinus's understanding of virtue also plays an important role in the doctrine of will. Virtue cannot be counted among the lower passions (*pathēmata*), nor is it governed by reason (*logos*). It is the action of mind (*nous*) itself or the quality of an act conformed to mind. Since mind is supreme and subordinate to nothing, so must

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virtue be. It has as its purpose to moderate the passions and desires (*orexeis*). The urge to effect this order and goodness in the soul arises, of itself, in mind as a free impulse subordinate to nothing.<sup>12</sup>

No matter what term is used for freedom—*eleutheron*,<sup>13</sup> to *eph' hēmin*, *autexousion*<sup>14</sup>—it is clear that every virtuous act must be free. In fact, virtue is itself freedom. Inge again confirms this opinion when he says, "Virtue is not so much free as identical with freedom; it is the unobstructed activity of the higher soul."<sup>15</sup> It will become clear below that, if virtue is free (*eleuthera*), it must also be self-disposed, independent, and deliberate. But first these terms require definition.

A defect that mars many commentaries and translations of Plotinus is their failure carefully to separate these terms, translating them indiscriminately as "freedom," "will," "willed," or "self mastery." To avoid this confusion the purpose here is briefly to define and indicate the translations to be employed in this paper.

The term which occurs most frequently is to *eph' hēmin*, in another form *kyrioi praxai*.<sup>16</sup> Plotinus is careful to describe it as the ability to act not as slaves to fate or to necessity or to strength of passion but only out of our own independent desire (*orexis*)—to so act with nothing impeding our wishes.<sup>17</sup> The most apt translation seems to be "self-disposed."<sup>18</sup>

The next word to be considered is *autexousion*, translated "independence,"<sup>19</sup> the second most frequently used word in Plotinus's doctrine of will. Plotinus applies this word to movement and to the choice of the deity to come and put order into the world. It also refers to the power and sovereignty of the deity.

*Hekousion*<sup>20</sup> and its contrary *akousion*<sup>21</sup> follow. When the soul acts under external force, or is compelled to seek nongood rather than the good, its action is *akousion*. But when the soul acts under the influence of pure mind and is self-disposed, then it is *hekousion*.

<sup>12</sup>*Ibid.*, 5 and 6.

<sup>13</sup>*Ibid.*, 5.

<sup>14</sup>*Ibid.*, 6.

<sup>15</sup>*Philosophy of Plotinus*, II, 185.

<sup>16</sup>*Enneads*, VI, 8, 3-6.

<sup>17</sup> "[Ω]ς τούτου ἐσομένου ἂν ἐφ' ἡμῖν, δὲ μὴ τύχαις δουλεύοντες μηδὲ ἀνάγκαις μηδὲ πάθεσιν ἰσχυροῖς πράξαιμεν ἂν βουλῇ-θέντες οὐδενὸς ἐναντιουμένου ταῖς βουλῇσεσιν" (*ibid.*, I, II. 27-30).

<sup>18</sup>This translation is taken from Grace H. Turnbull, *The Essence of Plotinus* (New York, 1948).

<sup>19</sup>*Enneads*, III, 2, 4; IV, 8, 5; VI, 8, 3-6 and 20.

<sup>20</sup>*Ibid.*, III, 1, 9; VI, 8, 1, 4.

<sup>21</sup>*Ibid.*, VI, 8, 1 and 3-4.

<sup>22</sup>*Ibid.*, III, 3, 4; VI, 8, 3-4, 6-7, and 12.

<sup>23</sup>*Ibid.*, VI, 8, 1, 3, and 5-6.

<sup>24</sup>*Ibid.*, II, 3, 14-15 and 19; III, 3, 3 and 4, 5; IV, 3, 12; 4, 31, 35; 7, 5.



The amount of knowledge present in the agent, or the lack of it, can also determine whether an act is *hekousion* or *akousion*. Insofar as the agent is conscious of what he is doing, the act is *hekousion*; but insofar as he is ignorant of what he is doing, the act is *akousion*. This knowledge can be of general laws or of particular circumstances. We will translate these terms as "deliberate" or "indeliberate."

Perhaps the most common word used by the Greeks to express the concept of freedom is *eleutheron*. Plotinus, too, employs this word and closely connects it with those so far considered.<sup>22</sup> All these other four terms, however, apply properly only to the act, whereas *eleutheron* denotes more frequently a state or a principle, though it can also refer to the act; that is, the Good, Soul, Mind, virtue. A being neither acting for another nor in any way depending upon another is *eleutheron*, in contrast to a person enslaved by his lower nature. In this restricted sense the term *eleutheron* will be used to describe such a being, act, or state as "free."

This leads to the further consideration of what Plotinus understands this "free" principle to be. He calls it *boulēsis*<sup>23</sup> or "will." This is the ability to posit unimpeded or self-disposed action, immaterial, without need. The will resides in reason, or, as will be explained shortly, is a thought (*noēsis*) conformed to mind. Other words connected with will are *boulomai*, its root, and *ethelo* or *thelo*, "to wish," often used to signify the particular action of the will. In this last sense "to will" refers most properly to the desire for the Good.

That act which is considered characteristic of the will, and to which must be applied self-disposal, independence, deliberateness, and freedom, is *proaeresis*.<sup>24</sup> This pertains not to body but to the soul, mind, and will. It is used in reference to various acts; those by which man is partial cause of his own destiny, marriage, the acts of the stars (*sic*), the act of Him who proportions all things. This particular act is what Plotinus means by free choice and will be translated as the "act of choice."

After this somewhat tedious exposition of terms, the problem facing this study is now apparent. From his plethora of terms it is not difficult to see or establish that Plotinus held free will, liberty, and free choice in man. But what he meant by these terms is another

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problem. It is evident that he intends all these terms to refer to virtue, mind, and soul, as well as to Mind and Soul, and somehow to depend on them. First the nature of this act must be discovered, using the act-to-principle technique, and secondly the nature of the principle of this act.

The word most often applied to the act under consideration is "self-disposal" (*to eph' hēmin*). This word is a more generic term, and any other word used for freedom can be considered a more properly contracted species of *to eph' hēmin*. Consequently, whatever can be said of *to eph' hēmin* can be said of its inferiors.

Self-disposal for Plotinus is that characteristic of a man's act that opposes it to enslavement by fate, necessity, strength of passion, force, or his own lower nature. It is unimpeded self-movement.<sup>25</sup>

This self-movement, or self-disposal, cannot be the activity of the imagination since it must then be attributed to beasts, infants, and the depraved, and Plotinus considers it characteristically human.<sup>26</sup> Nor can self-disposal characterize external practical action (*praxis*) as such, since for Plotinus an external action is always ordered to an end other than itself, that of the universe, and must therefore be externally necessitated.<sup>27</sup> Self-disposal, then, since it is self-movement and free, cannot be necessitated; nor for this same reason can it be an external action. Self-disposal must, then, be an internal act of man which is an act of knowledge. Nor can this be sense knowledge, since mere sense knowledge of an act never made anyone self-disposed originator of that act. If it did, even beasts would have self-disposal, since they too have sense knowledge of their acts.<sup>28</sup> The conclusion is, then, that self-disposal depends on intellectual knowledge.

But even intellectual knowledge<sup>29</sup> cannot of itself cause an action (*tēn praxin agei*). Therefore, since self-disposal causes activity, de-

<sup>25</sup>*Ibid.*, vi, 8, 4.

<sup>26</sup>*Ibid.*, 2-3.

<sup>27</sup>*Ibid.*, 2 and 4-6.

<sup>28</sup>*Ibid.*, 2.

<sup>29</sup>At this point various terms connected with intellection in Plotinus must be distinguished. *Logos* (iii, 4, 2; iv, 3, 23) is the principle of reasoning; *logismos* (vi, 8, 1) is a noun meaning the operation of the reason; *nous* (vi, 2, 20, 22; vi, 8, 13) is the seat of knowledge, perfect in itself; *noēsis* (i, 1, 1; ii, 3, 17; iii, 1, 3) is used

to express conceptualization; *gnomē* (ii, 1, 6; iii, 2, 8; iv, 3, 7) is a judgment; and *theōria* (iii, 8, 3; 9, 1; v, 3, 5) means contemplation.

<sup>30</sup>*Ibid.*, vi, 8, 2.

<sup>31</sup>*Ibid.*, 2-3.

<sup>32</sup>*Ibid.*, 5.

<sup>33</sup>*Ibid.*

<sup>34</sup>*Ibid.*

<sup>35</sup>*Ibid.*, 3.

<sup>36</sup>*Ibid.*, 5.

sire (*orexis*) must become part of it, since only desire moves to action. The desire in question can neither be the irascible nor the concupiscible appetites, since even beasts have these.<sup>30</sup> The only desire remaining is the rational (*logismos met' orexeos*), and this is proper to self-disposal.

Not any intellectual desire, however, will cause the activity of which there is question, but only right desire and right reasoning (*to ortho logismo kai tē orthē orexei*).<sup>31</sup> Therefore, from the analysis of the terms used, self-disposal includes these elements—reasoning and right desire, with a view to, and preceding, practical action.

It is well to analyze this same act of a man from another point of view. The nature of virtue has been considered. Simply stated, virtue is free (self-disposed, independent, deliberate in every way). Therefore, a person practicing virtue conformable to mind must *eo ipso* be free and self-disposed.<sup>32</sup> The meaning of self-disposal can then be reduced to a soul practicing virtue in conformity with mind, and again it is clear that self-disposal must be in the mind. Plotinus summarizes these conclusions.

If virtue, then, is somehow a kind of second mind (*nous*), and a habit causing the soul to become that mind . . . in the practical action itself there is no self-disposal, but only in the mind (*no*) free from the practical action itself (*ton praxeon*)<sup>33</sup>.

A question arises concerning the precise object of the prepractical contemplation. Simply, it is the practical action to be done (due to the rational desire) in the light of virtue, which is the soul contemplating the Good through Mind. But this will become clearer below.

Another characteristic of man's act is introduced by Plotinus in his understanding of independence (*autexousion*). All that can be said of self-disposal must equally be said of independence, and the two are very frequently linked.<sup>34</sup> An act can neither be self-disposed nor independent if it proceeds with ignorance of what is right or is led by chance, imagination, or the passions of the body.<sup>35</sup> Both self-disposal and independence are reduced to the internal activity of reasoning antecedent to the external act, and to that which depends on virtue.<sup>36</sup> The question must now arise concerning a distinction between these

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two terms used by Plotinus to refer to the same action. The solution will be found, perhaps, in the solution to two other problems raised by Plotinus.

In *Ennead* VI, 8, 2, Plotinus considers the relationship between reasoning or discourse (*logismos*) and desire (*orexis*). He seems, then, to understand some distinction between them. His problem here is one of causality. If the desire arises from the composite (man), then the desire must obey natural necessity, since the body is in the external world of necessity and self-disposal cannot be found in such an act. If the desire, on the other hand, arises only from the soul, then not all the acts we commonly refer to as self-disposed are really such, since it is the composite man who acts. A third possibility presents itself if the reasoning is entirely independent of the desire; but then how can the desire ever arise at all? Therefore, somehow the two must be independent yet somehow connected.

The following analysis is an attempt to solve this problem as well as to find some distinction between self-disposal and independence. Plotinus, it has been seen, considers all external actions necessitated.<sup>87</sup> But he states explicitly that since neither self-disposal nor independence is reducible to external action, they cannot be necessitated.

Consequently, even the independence and the self-disposal found in practical actions is not reducible to the fact of acting nor to the external activity but to the internal activity, namely, thought and the contemplation of virtue itself.<sup>88</sup>

Thought is certainly free, and virtue, or a being contemplating virtue, is the same.<sup>89</sup>

From this citation and a general understanding of Plotinus's doctrine so far considered, it may be concluded that though the external act as such is not free, the internal activity of mind preceding that act is free. But this internal activity of mind preceding that act has a twofold note. It is thought, contemplation, or reasoning (*logismos*); but if it is to issue into any external actions it must somehow include desire (*orexis*).

<sup>87</sup>*Ibid.*

<sup>88</sup> "... ὥστε καὶ τὸ ἐν ταῖς πράξεσιν αὐτεξούσιον καὶ τὸ ἐφ' ἡμῖν οὐκ εἰς τὸ πράττειν ἀνάγεσθαι οὐδ' εἰς τὴν ἕξω, ἀλλ' εἰς τὴν ἑντος ἐνέργειαν καὶ νόησιν καὶ θεωρίαν

αὐτῆς τῆς ἀρετῆς" (*ibid.*, 6, ll. 19-22).

<sup>89</sup>*Ibid.*, 5-6.

<sup>40</sup>*Architecture of the Intelligible Universe*, pp. 100-1.

In this distinction, then, the difficulty raised in *Enneads* VI, 8, 2 may be solved. The reasoning is free because of its connection with mind and soul, both of which must be free. The desire, then, does not arise from the composite but is consequent upon this reasoning. Although it arises only from the soul, then, the act is still self-disposed and independent. But—and this must be stressed—there are two actions under consideration: the first, internal, rational desire, which is self-disposed and independent, properly, as will appear, the act of choice; the second, external, directed, posited, and caused by the first. The second act is of the composite, external and therefore necessary but proceeding from, and caused by, the internal, which is self-disposed, independent, and free. The desire, then, arising from this reasoning depends on reasoning; and since reasoning is free, the desire is also free.

But this distinction solves as well the problem of Plotinus's use of self-disposal and independence. Properly, the *to eph' hēmin* refers to the reasoning, while the *autexousion* refers to the desire. In this way Plotinus brings out the distinction between the two principles (if such they can be called) of this composite act of choice preceding practical actions.

This problem of the connection between internal freedom and external necessity can also be considered from a moral or ethical point of view. Professor A. H. Armstrong states the question well.

It is the old difficulty of which Plotinus is fully conscious, which arises whenever he tries to reconcile the moral responsibility of the individual soul for its own destiny with the universal all-embracing order. . . . It must be remembered, however, that for Plotinus man is a 'bridge-being', intermediate between the two worlds.<sup>40</sup>

If these two worlds are understood as those of necessity versus freedom, of spirit versus matter, of soul, mind, and good versus body, the problem is solved. Man is partly in this world of matter, body, and necessity in which there is no freedom. Man also, however, partakes of that other higher, free, and self-disposed world of reason and independent desire arising from this reasoning; and his acts in this

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world are anterior to those of his necessitated physical and material nature. Man is, therefore, free before positing external acts. The reasoning and desire are self-disposed and independent. However, once man has freely decided to act and the act is posited in the external material world of body, it is necessary. But it must be kept in mind that it was man, choosing what he thought best in the light of the Good, that determined what this act should be.

If it is asked further why man's choice always conforms to the order of the external world decreed by the One, Plotinus would probably reply:

Mind has a principle different from itself, but not outside itself since it is in the Good. To say, then, that it is conformed to the Good makes its self-disposal and freedom all the greater, since freedom (*eleutheron*) and self-disposal are sought for the sake of the Good. If that being strives for the Good, it is all the more self-disposed, since it tends to the Good by its own self-disposition, because it is turned to that which is best for itself.<sup>41</sup>

To resume again the analysis of this act of man, all that has been said of self-disposal and independence also applies to the act as deliberate (*hekousion*). A deliberate action is one in accord with, and depending upon, self-disposal and free from external force. Plotinus says that the two are often confused but really are different and separable. An action can be self-disposed and still be either deliberate or indeliberate.<sup>42</sup> Self-disposal depends on reason to be such, but deliberate or indeliberate in an act requires actual knowledge of particular circumstances or general laws. For example, because of his rational desire a man is independent and can dispose himself to kill another man. Now this act, though self-disposed and independent, can be indeliberate if he is ignorant of the universal prohibition against homicide. Or it can be deliberate in the sense that he knows

<sup>41</sup>*Enneads*, vi, 8, 4.

<sup>42</sup>This obviously is not the case with self-disposal and independence. If an act is independent it must be self-disposed and, if applied to the actions of man, a composite, also vice versa.

<sup>43</sup>*Enneads*, vi, 8, 1. An indeliberate act done out of ignorance can still be self-disposed but not if done under force or passion.

<sup>44</sup>*Ibid.*, 8, 3-4.

<sup>45</sup>*Ibid.*, 6-7.

<sup>46</sup>*Ibid.*, 4 and 6.

<sup>47</sup>*Ibid.*, 6.

<sup>48</sup>*Ibid.*, iii, 3, 4.

<sup>49</sup>*Ibid.*, vi, 8, 12.

<sup>50</sup>*Ibid.*, 5.

<sup>51</sup>*Ibid.*, 2.

<sup>52</sup>*Ibid.*, iii, 3, 4.

<sup>53</sup>*Ibid.*, vi, 8, 4.



it is wrong to kill another, but indeliberate if he does not know that other man is his friend. An act, then, can be deliberate or indeliberate in general, or mixed, depending upon the knowledge present in a particular circumstance.<sup>43</sup>

Man, then, places an act of which he is the master; that is, to which he disposes himself. This act has a double content. It depends upon reason or mind, which stems from the Soul, Mind, and Good and gives it this self-mastery. But it depends also upon desire of an external action which it proposes to itself. In this sense it is independent. This self-disposed independence can be deliberate or indeliberate depending upon the particular knowledge of universal laws or circumstances in a given situation. This whole act, in all its various aspects, Plotinus further denotes as free (*eleutheron*).

A free act is also self-disposed, independent, and deliberate. Self-disposal, however, is practically always used to apply to an action, while freedom is mostly used in reference to a static state or principle, although it is also annexed to the act proceeding from such a principle. This static state is a person or being,<sup>44</sup> soul,<sup>45</sup> mind, and virtue,<sup>46</sup> immaterial being (*aulon*),<sup>47</sup> principle (*archē*),<sup>48</sup> or essence (*ousia*),<sup>49</sup> and also describes an intrinsic note of willing and choosing (*helenomenos*).<sup>50</sup>

If a distinction is required between freedom on the one hand and self-disposal, independence, and deliberateness, on the other, it can be said that while these latter refer to the action itself, freedom refers to an action as dependent upon, and proceeding from, a principle which is itself free. Freedom, then, as distinct from these other terms, connotes a relationship and directs attention to the principle of the act.

Plotinus calls this principle the will (*boulēsis*). He asks to what part (*eis hēmas*) of ourselves we must attribute self-disposal.<sup>51</sup> Having said that man possesses a free principle (*eleutheran archēn*) which distinguishes him from beasts,<sup>52</sup> he identifies this principle with the will.<sup>53</sup>

He next asks: How reduce self-disposal to the will? Mind, virtue, and soul are free (*eleutheroi*), as well as the activities to which they dispose themselves. Since self-disposal is impossible without freedom and since freedom is a spiritual entity, self-disposal must also be

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reduced to a spiritual entity. Whatever proceeds from this spiritual principle is self-disposed, and whatever it wishes and accomplishes without obstacle is the same.<sup>54</sup>

But the will itself is this spiritual or nonmaterial entity. It imitates a being conformed to Mind, and Mind is in the Good. So the will wills the Good, and mind contains whatever the will wills. Further, it must be noted that what approaches mind can only be soul. The conclusion is necessarily, therefore, that the will is the soul becoming thought (*noēsis*) in contemplation of the Good.<sup>55</sup> Professor Inge has put this well: "In the world of soul it [the will] is the proper life and activity in which the Soul expresses itself."<sup>56</sup> In brief, since Plotinus admits the doctrine of powers (*dynameis*),<sup>57</sup> the will might be defined as the particular power of the soul to become thought. By reason of this affinity with soul and mind, the will is free to dispose itself to posit a free, independent, and deliberate or indeliberate act, which is a free choice (*proaeresis*). The result of this choice is an external action (*praxis*).

This act of choice is an act preceding the actual external action. It can be understood in two ways. In general, all animals have some choice consequent upon their concupiscible desires and appetites. But since the animal can only make certain choices whose end is outside the agent and necessarily conformed to the end of the universe, these choices are externally necessitated. In a stricter sense this act is called by Plotinus right choice (*orthē proaeresis*). This choice, whose actuating desire is *orexis*, seeks the Good and is superior to passion.<sup>58</sup>

Plotinus explicitly applies this act to the soul;<sup>59</sup> and in another form of the same word, *helomenos*, he refers it to a being disposed for the Good and links it with sovereignty due to virtue alone. In this sense it proceeds from the will.<sup>60</sup> From these descriptions it is clear that the act of choice must be free.

Etymologically examined, the word *proaeresis* means an act preceding another act. If *haereo* means a seizing, doing, or accomplishing, then the *pro-aereo* is a seizing, doing, or accomplishing *before*—that is, the choice to perform some particular act previous to the act itself.

<sup>54</sup>*Ibid.*, 6.

<sup>55</sup>*Ibid.*

<sup>56</sup>*Philosophy of Plotinus*, I, 253.

<sup>57</sup>*Enneads*, IV, 4, 35.

<sup>58</sup>*Ibid.*

<sup>59</sup>*Ibid.*, III, 4, 5.

<sup>60</sup>*Ibid.*, VI, 8, 5.

<sup>61</sup>*Ibid.*, II, 3, 9.

The act of choice, then, proceeding from free will, is free, self-disposed, independent, and deliberate.

It is clear, in conclusion, that in Plotinus's doctrine there is place for a free will and free choice in man because of the freedom of man's higher soul. Man is a free being for whom "there is another emancipated life. . . . It is in this paradise that the soul lives united in contemplation with the divine and the beautiful."<sup>61</sup>

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## Grotius on the Law of War

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The right to peace represents one of the most fundamental of human needs—the need for security and the preservation of human life.<sup>1</sup> The greatest threat to human life, health, and security is the use of physical violence; the least productive condition of mankind, a permanent state of war. As the first obligation of justice, as traditionally conceived, is to do no man injury,<sup>2</sup> the foremost right of man is peace or resistance to war. Life or being is a condition of the enjoyment of other rights. Peace may be the price of tyranny and slavery, but the price of war is death and destruction of the material conditions of happiness. Without peace there can be no fraternity; without fraternity there is the risk of losing both liberty and equality. The right of fraternity and therefore of peace is a condition of social order, as war is a condition of barbarism and anarchy.<sup>3</sup>

There are two ways of disputing in the world, the one by reason and the other by open force; but, as the latter is more becoming to brutes than to human beings, it should be used only against those who have disturbed

<sup>1</sup>This paper was read at the first annual meeting of the Central Renaissance Conference, University of Missouri, May 14, 1955.

<sup>2</sup>Cicero *Offices* i. 7, trans. Thomas Cockman (*Offices, Essays, & Letters*, [London: Dent, 1949]).

<sup>3</sup>Hobbes, *Leviathan*, Part I, Chap. 13.

<sup>4</sup>Cicero *Offices* i. 11, trans. Cockman.

<sup>5</sup>*The City of God*, Book 19, Chap. 12, trans. and ed. Marcus Dods (Edinburgh, 1892).

<sup>6</sup>Grotius, *De Jure Belli ac Pacis*, ed. James Brown Scott (2 vols. Oxford, 1925), Vol. II, *Prolegomena* (trans. F. W. Kelsey et al.); Hobbes, *Leviathan*, Part I, Chap. 14.

<sup>7</sup>Hobbes, *Leviathan*, Part I, Chap. 13.

<sup>8</sup>*De Jure Belli ac Pacis*, Book I, Chap. I, sec. 11.

<sup>9</sup>*Summa Theologiae*, II-II, qq. 37-42, trans. Fathers of the English Dominican Province (22 vols. London: Burns, Oates & Washbourne, 1929), Vol. 9.

<sup>10</sup>The idea of a law of nations is ambiguous. Although it is a literal translation of the Roman *jus gentium*, its original meaning was different from that of either St. Thomas or Grotius. It originally consisted of a set of rules, imbued with the principles of fairness and equity, for regulating litigations between non-Romans, and between foreigners and Roman citizens. Gradually these rules were extended to litigations between Romans. The Roman law of nations was originally a system of private law governing the relations between individuals of different nationalities. In the course of time it was extended to include the rules and legal institutions,

the peace, and only as a last measure for restoring it.<sup>4</sup> Without the external peace of the City of Man, according to St. Augustine, there is little opportunity to cultivate moral virtue and enjoy peace of mind: "Whoever gives even moderate attention to human affairs and to our common nature, will recognize that if there is no man who does not wish to be joyful, neither is there anyone who does not wish to have peace."<sup>5</sup> Both Grotius and Hobbes subscribed to this right in preference to other rights.<sup>6</sup> In periods of relative peace, the importance of this right has frequently been underestimated; but during the breakup of the Roman Empire and the period of religious wars in the fifteenth and early sixteenth centuries, peace was ranked of first importance to man. In our own day, with two world wars behind us and the development of man's powers to destroy entire areas of the globe, the right to peace or security and the need for fraternity are, once again, being given the consideration due them.

The classic work on the right to peace is Grotius's major work, *The Law of War and Peace*. War, according to Grotius, is the abomination of desolation. As much as any other man, he would have subscribed to Hobbes's classic indictment of war:

In such condition there is no place for industry, because the fruit thereof is uncertain: and consequently no culture of the earth; no navigation, nor use of the commodities that may be imported by sea; no commodious building; no instruments of moving, and removing, such things as require much force; no knowledge of the face of the earth; no account of time; no arts; no letters; no society; and which is worst of all, continual fear, and danger of violent death; and the life of man, solitary, poor, nasty, brutish, and short.<sup>7</sup>

War, as defined by Grotius, is a state of strife or contention between opposing parties.<sup>8</sup> It includes acts of fraud as well as violence; private as well as public strife. Unlike St. Thomas, for whom war implied the use of violence,<sup>9</sup> for Grotius it is a general term for all vices opposed to peace, in thought and word as well as deed.

In arguing for the existence of a law of war, Grotius's intent was to circumscribe the boundaries of the more destructive kinds of war. Such wars are primarily national, although civil war and the state of war by which the criminal puts himself in opposition to society are also destructive of life and property. As there are many who view international law or the law of nations<sup>10</sup> with contempt, Grotius felt called upon to vindicate it against the charges that might makes right and that the administration of a state is independent of justice. The alternative to cynicism was sought in a right to war, as well as peace, founded not upon the will or consent of nations but upon human reason.

For the rational basis of war, Grotius turned to arguments from the classics and the Scriptures. The intrinsic merit of Grotius's contributions to the law of war rests largely upon his acceptance of the Scholastic tradition. His painstaking analysis of problems, his rigorous insistence upon distinctions, as well as respect for current fact and tradition, suggest the method of St. Thomas. When the Schoolmen agree on a point of morals, according to Grotius, it rarely happens that they are wrong. In respect for the tradition of Biblical and classical scholarship, and for the authority of the Church, Grotius writes thus at the close of his *Prolegomena*: "And now if anything has here been said by me inconsistent with piety, with good morals, with Holy Writ, with the concord of the Christian Church, or with any aspect of truth, let it be as if unsaid."

Grotius's work shows the immediate influence of the neo-Scholastics, who, even more than Grotius, were responsible for the foundations of international law. Franciscus de Vittoria's *De Jure Belli* and Suarez's *Tractatus de Legibus ac Deo Legislatore* transmit the theory of St. Thomas concerning the just causes of war, which is reformulated and enlarged upon by Grotius. The value of Grotius's work is not so much its originality as its transmission and fulfillment of a tradition—the doctrine of a right to war and peace which had first been comprehensively treated in the writings of St. Augustine.<sup>11</sup>

As law or justice is defined as whatever is conformable to man's nature as a reasonable and social being,<sup>12</sup> the just causes of war can be determined, not by an appeal to the actual practices of nations, but only by showing their consistence with reason. This can be shown, according to Grotius, by two kinds of argument: a priori, when anything may be demonstrated to agree with the dictates of reason, in themselves clear, distinct, and unchangeable; and a posteriori, when, without absolute proof or only upon probability, something may be inferred to agree with the principles of reason because of common consent.<sup>13</sup> One test of the law of war is that

public as well as private, common to all nations. In the form of external public law it gradually acquired an international character; besides laws governing domestic and property relations, it came to include the law of embassies and the law of the spoils of war. Beginning with rules of equity, for the correction of the Roman *jus civile*, the law of nations developed into a system of universal common law, with a broader connotation than the modern law of nations, which is exclusively international. During the Middle Ages, the law of nations was interpreted as universal common law. By the time of

Grotius it began to be restricted in meaning to international law and to be limited to the relations between sovereign states.

<sup>11</sup>John Eppstein, *The Catholic Tradition of the Law of Nations*, (London: Burns, Oates & Washbourne, 1935), pp. 65 ff.

<sup>12</sup>Grotius, *De Jure Belli ac Pacis*, Book I, Chap. 1, sec. 3. In agreement with St. Thomas and St. Augustine before him, there is no distinction, for Grotius, between law and justice, so that a law that is not just is no law at all.

<sup>13</sup>*Ibid.*, sec. 12.

<sup>14</sup>*Ibid.*, Book II, Chap. 1, sec. 2.

<sup>15</sup>*Ibid.*, sec. 5.



it is accepted as such by the more civilized nations. Yet the general consent is not necessarily rational, as Grotius acknowledges, so that it is not a sufficient justification of the conventions governing war.

The result of Grotius's distinction between the will and the law of nations was to delimit the conditions of a just war and to question the will of nations for sanctioning wars which, by the light of reason, must be deemed to be unjust. Reason, alone, is incapable of bringing peace to the world unless supported by the will of nations. Yet the latter permits injustices which the law of nations, strictly applied, would find intolerable. Thus, whenever the justice of war is founded exclusively upon consent, there may be wars in which each side appears to have an equal claim to justice and in which neither side appears unjust. Although there is no law which commands us, under the same circumstances, both to do and to abstain, in matters of disputed right it is the custom to charge neither side with injustice. Yet to argue that wars may occur in which neither side is unjust or both sides are just is to confuse, according to Grotius, the consent of nations with the laws which ought to govern them. To assume that no act is lawful or unlawful but that consent makes it so is inconsistent with the rule of reason—by which human acts are just or unjust independently of our judgments of them.

For Grotius, peace is the fundamental right of man, although the idea of a just war is not self-contradictory. There is a law of war, in addition to a law of peace, for not every war is unjust. War is not only the enemy of peace; it is also the principal means of its enforcement. Right reason prohibits only that use of war which unjustly deprives another of his right. The first and necessary concern of society, for Grotius, is not the wisdom and virtue of its members, as it was for Aristotle and St. Thomas, but the maintenance of elemental human rights with the help of a common power.

The most basic of human rights is that of self-defense. Although this right is limited to the defense of life and limb and does not extend to the defense of other human rights, such as the right to property or liberty, to this extent nations are justified in repelling force by arms. Besides the right to self-defense, war is justified in reparation for damages and in punishment for crime.<sup>14</sup> Every person has a right to defend and recover goods which lawfully belong to him and to have criminals brought to justice. Yet war is justified only against an actual aggressor. Threats to our person and property, or the knowledge of plots being formed against us in preparation of war or ambushade, are not sufficient conditions of waging war.<sup>15</sup> Most wars have their origin in fear, although fear cannot justify anticipatory slaying as a method of preventing harm to oneself.

The same judicial means of settling disputes within the state are ap-

plicable between states, the difference being that in the case of internal controversies there is a common judge, whereas in the case of a general war each party is judge in its own behalf. Although the analogy between state and international law is somewhat misleading because of the absence of a common judge and a common power to enforce justice, the civil and criminal laws judging violations of right within each state may be justly extended to govern similar violations of law between states. As within each state civil law judges violations of right by the method of reparation, and criminal law by the method of punishment, so between states wars of reparation and punishment may also be justified.

Yet the conditions of a just war, according to Grotius, are subject to the qualification that in defending oneself against aggression, enforcing reparation, or punishing the enemy there is not cause for still greater injustice. The right to war is limited by the right to peace, so that injustice should be tolerated for the sake of even greater justice. When the outcome of war is uncertain, there are reasonable precautions against rashly engaging in it. Self-preservation may justify forbearing hostilities against an aggressor or surrendering to an enemy of vastly superior strength. To punish a wrong or to assert a right by resort to arms is imprudent without the possession of superior force. If in pursuing a just cause the means are adequate to the end but are likely to cause a greater amount of evil than good, then peace is preferable to victory. When the injustice occasioned by the calamities of war is likely to outweigh the justice to be attained by its successful conclusion, it is not only imprudent but unjust, according to Grotius, to wage war.<sup>16</sup>

War is unjustified, in accordance with the law of nations, except on grounds of self-defense, reparation, or punishment. Yet wars of reparation and punishment are frequently unjust because of the sacrifice in human life required in waging them. In practice, the only lawful cause of war is imperious necessity, when the failure to wage war is likely to be followed by calamities far more unjust.<sup>17</sup> Grotius's conditions of a just war are not of equal weight. The right of self-defense is fundamental, and there is little justification in waging a war of reparation or punishment in violation of it.

Wars justified by the law of nations seldom correspond to the wars actually waged by men. Not only aggressive but many so-called defensive wars are unjust, according to Grotius, because they result in a loss of life far outweighing the losses occasioned by an unfavorable peace. Wars in self-

<sup>16</sup>*Ibid.*, Chap. 24, sec. 5.

<sup>17</sup>*Ibid.*, secs. 7-8.

<sup>18</sup>*Ibid.*, sec. 1.

<sup>19</sup>*Ibid.*, *Prolegomena*, sec. 25.

<sup>20</sup>*Ibid.*, Book III, Chap. 4, sec. 3.

<sup>21</sup>*Ibid.*, Chap. 10, sec. 1.

defense may be unjustified if they cannot be waged except by inordinate sacrifices in human life.<sup>18</sup> Only those wars are, in practice, defensive which entail less sacrifice in human life in waging them than in surrender. Loss of property, as a result of domination by a hostile power, is not itself sufficient cause of waging a defensive war. War is justified against the threat of racial and national genocide or against semi-civilized peoples with barbarous propensities—but scarcely otherwise. Between civilized nations, a war in self-defense is a contradiction in terms—for the right to property rather than life is threatened, and the best means of self-defense, under such circumstances, is surrender.

In order that wars may be wholly justified, the means of waging them should also be just. Wars should be carried on with not less scrupulousness than judicial processes in accordance with civil law.<sup>19</sup> When arms have once been taken up, even in accordance with a just cause, there is seldom any respect for law. The will of nations is sufficiently lax to permit the infliction of injury upon all persons residing in enemy territory. This power to inflict injury extends over women and children, over hostages and civilians, and even over those who have surrendered unconditionally. By the will of nations, the prerogative of killing extends to all persons who may be considered enemies.<sup>20</sup> It is permissible to kill the enemy or damage his property, not merely for him who wages war for a just cause but for either side indiscriminately.

Yet how is it, asks Grotius, that murder committed by individuals is considered a crime but, if committed on a grand scale and sanctioned by public authority, is done with impunity? Acts of public violence and pillage meet with the approval of nations because it is dangerous to the security of other nations to judge them. It is also well-nigh impossible to know what the just limits are of self-defense, reparation, or punishment in any given case. The unqualified right to kill or harm the enemy is based entirely upon considerations of expediency, although what is expedient is not necessarily lawful—even if it does meet with the approval of nations. Although Grotius first considers acts which are lawful or permissible, in the loose sense of the term, as what may be done with impunity, he afterwards retraces his steps in denying the lawfulness or permissiveness of those same acts, as they deviate from the principle of justice.<sup>21</sup>

There are duties which must be performed even toward our enemies. Persons residing in enemy territory may not be killed at random. It is a law of nations that war should be conducted so that crimes may be remedied and corrected but not so as to involve the innocent in the same punishment as the guilty—even those who are guilty are to be spared for



the sake of the innocent.<sup>22</sup> In accordance with this law, children should always be spared and old men and women, too, unless they have been guilty of extremely serious offenses. Those engaged in peaceful pursuits, such as farmers and merchants, even though their labor should provide the enemy with the means of waging war, should be spared. Hostages and prisoners of war and those who have surrendered unconditionally should be spared. Reason does not sanction punishment except against those who have done wrong, and in just proportion to it. That killing a man may be just, it is necessary that he who is killed should not only have wronged another but in a manner punishable by death and on the decision of an impartial spectator.<sup>23</sup> As those who are responsible for a war are more guilty than their subjects, who are forced into their service, it is unlawful that they should suffer the same kind and degree of punishment. It is only by a sort of fiction that the enemy may be conceived as forming a single body or sharing equally in the guilt deserving of punishment.<sup>24</sup>

To the conditions of a just war must be added, therefore, that, in the course of waging it, the innocent should not be made to suffer unjustly. By implication, wars should be carried on in the open field or in desolate areas removed from the centers of civilization. That the enemy is unwilling to abide by the laws of war is no argument that one should also violate them. Should they be violated, wars originally undertaken for defense would also be aggressive and so cease to be justified. War, according to Grotius, is a means of settling differences that cannot be settled amicably and is analogous to the duel as a means of settling differences in private life. In accordance with the formal conditions of a duel, so also should wars be conducted with dignity. As in private life the well-being of innocent bystanders is given precedence over the capture of armed criminals, so also in wars between nations care should be taken not to risk the lives of innocent civilians. It is generally better, according to Grotius, to protect the innocent than to punish the guilty. As the principle of justice requires the least sacrifice of human rights, it obliges us to risk the lives of the innocent only as it is necessary to protect the lives of many more.

War is justified, in accordance with the law of nations, on the satisfaction of at least three conditions: (1) that one is the object of aggression; (2) that, on the supposition of surrender, there is likely to be more injustice, on the whole, than with a victory over the enemy (taking into

<sup>22</sup>*Ibid.*, sec. 8.

<sup>23</sup>*Ibid.*, Chap. 11, sec. 2.

<sup>24</sup>*Ibid.*, sec. 16.

<sup>25</sup>St. Thomas, *Summa Theol.*, II-II, q. 40, a. 1; trans. Dominican Fathers, Vol. 9.

<sup>26</sup>Grotius, *De Jure Belli ac Pacis*, Book I, Chap. 4, sec. 2.

<sup>27</sup>*Ibid.*, sec. 7.

<sup>28</sup>*Summa Theol.*, II-II, q. 40, a. 1; trans. Dominican Fathers, Vol. 9.

consideration the injustice of warfare and the possible death of innocent persons); and (3) that victory is partly guaranteed by superior force so that the likelihood of defeat is negligible. These conditions are cited by Grotius in the course of a chapter entitled "Warnings Not to Undertake War Rashly, Even for Just Causes." Although influenced by considerations of expediency or the consequences of human actions, they are correctly associated with a law of nations grounded upon reason rather than consent. The restricted use of war, in accordance with the law of nations, is defensible only as a last resort necessary to the preservation of human society.

Grotius's conditions of a just war are largely a reformulation of those of St. Thomas, although they also constitute a refinement upon them. St. Thomas had argued that war is justified only in order to prevent injustice—although once war is justified it may be directed to removing the conditions which gave rise to it. The first condition of a just war, according to St. Thomas, is that it should be commanded by a sovereign, so that all privately declared wars are unjust.<sup>25</sup> This condition is acknowledged by Grotius in his discussion of the right of revolution, although it is not included among the principal conditions limiting the use of war. It is not permissible, according to Grotius, for either private or official persons to wage war against the sovereign; as civil society was instituted for the purpose of maintaining peace, the state has the right to limit the natural right of resistance.<sup>26</sup> By the principle of justice men are obliged to disobey a sovereign who commands them to act unjustly but may be bound to submit to him when he treats them unjustly. There is a distinction, for Grotius, between disobedience of rightful authority and rebellion. It is permissible to flee from unjust persecution and even to defend oneself by force of arms when so attacked but, as a general rule, never to rebel or seek to overthrow that authority. There is but one exception to this rule, and that is when resistance could be made without great disturbance or injury to a great many innocent people, on the assumption that even the original formulators of the social contract would have allowed such a right in case of imperious necessity.<sup>27</sup>

The second condition of a just war, according to St. Thomas, is that hostilities should begin because of some fault or crime on the part of the enemy, and for the purpose of punishing or repairing wrongs.<sup>28</sup> As Grotius interprets this condition, war is justified only if one is the object of aggression. It is unnecessary that the enemy's aggression take the form of military hostilities against one's own nation; for, Grotius argues, war may be justly undertaken by one nation in defense of the oppressed of other nations, even when those nations are guilty of crimes only against their own subjects. In such an event, the aggressor is the nation whose hostilities

are directed against its own citizens; and the nation which comes to their succor, the defender of their lives and property. Unlike St. Thomas, however, Grotius argued that wars are seldom justified unless directed to self-defense, so that they need not have for their just intent the punishment or reparation of wrongs. Theoretically, wars of reparation and punishment are justified; practically, there are few instances in which the cost of waging such wars can be justified, even with the victory they bring.

St. Thomas's third condition is that war, to be justified, should have as its rightful intention the advancement of good or the avoidance of evil.<sup>29</sup> If a war should be declared by a legitimate authority and in response to hostilities by another power, it may yet be rendered unjust through a wrong intention. This condition of St. Thomas corresponds to Grotius's second and third conditions of a just war. Although intention, for St. Thomas, is an act of the will, it presupposes an act of intellect ordaining actions to a particular end. The intention of the end is the same act as the willing of the means, so that intention implies choice and deliberation about the means necessary to secure its end.<sup>30</sup> Should the consequence of surrendering to an unjust enemy be more conducive to the greatest amount of justice, on the whole, than victory consequent upon the waging of war, then the intention to wage war is unjust. The intention of a just end cannot be disassociated from its particular means, so that war is justified only if victory is worth the cost in human lives and is itself partly guaranteed by the possession of superior force.

War between nations is justified almost exclusively on the basis of man's right to self-defense. Reparation and punishment, as Grotius rightly argued, seldom justify war on their behalf. Yet Grotius's conditions of a just war are sufficiently lax to permit war without recourse to arbitration. To St. Thomas's and Grotius's three conditions of a just war should be added a fourth, that all war should be consistent with the decisions of an international court of justice. The Jesuit Father Taparelli d'Azeglio has argued that war is justified on the ground of punishment only when it is in fact international punishment; within the state, private persons are not allowed a right of punishment, so that neither is such a right applicable between states.<sup>31</sup> As what is true of the criminal law is also true of the civil law, wars of reparation are also unjustified except on the judgment of a common authority. By this argument, the rejection of arbitration becomes the test of aggression, and war declared by a state on its own authority is unjustified.

<sup>29</sup>*Ibid.*

<sup>30</sup>*Ibid.*, I-II, q. 12, a. 4; Vol. 6.

<sup>31</sup>Eppstein, *Catholic Tradition*, pp. 131 and 169.



## The George Holmes Howison Lecture, 1956

DESMOND J. FITZGERALD, *University of San Francisco*

On May 9, Reverend I. M. Bochenski, O.P., professor of philosophy, University of Fribourg, and visiting professor at the University of Notre Dame, delivered the 1956 "Howison Lecture" in philosophy at the University of California. The title of the lecture was "Logic and Philosophy."

Sketching the history of the relationship of logic and philosophy, Father Bochenski noted that the growth and development of formal logic has not been one of constant progression but has rather come in three waves with long periods of stagnation in between. The waves of successful activity were the Greek period from Aristotle to the Stoics, the thirteenth and fourteenth centuries of the Scholastic period, and the modern period dating from Boole but largely developing since the turn of the present century.

Until this last period logicians were philosophers and most philosophers at least taught logic—with certain exceptions such as Cicero, Descartes, the humanists, and contemporary existentialists, who, like Jaspers, have attacked logic. In the twentieth century we have witnessed some logicians in their positivism attacking philosophy and other philosophers attacking modern logic in their misunderstanding of it as quantitative or in their objections to material implication. While logic and ontology have been of influence upon one another (the ontology stemming from Plato emphasized a logic of predicates over against a logic of propositions, and Kant's ignorance of the variety of sentences led to falsity in the table of his categories), Professor Bochenski stressed that as logic develops it outgrows its ontological influences. A highly developed formal logic is ontologically neutral.

Father Bochenski criticized the attackers of modern logic such as Jaspers and Veatch as men who did not understand it. He insisted instead that logic should be allowed to develop in an ontologically neutral atmosphere. Then, since logic is vital to philosophy, let philosophers learn and use symbolic logic as their instrument in the analysis of such problems as analogy.

The "Howison Lecture" in philosophy is a memorial to George Holmes Howison, the turn-of-the-century idealist who headed the philosophy department at Berkeley. The list of the previous lecturers in the series is like a roll-call of American and British philosophers, starting in the 1920's with Professors Hocking, Lovejoy, Montague, Perry, C. I. Lewis, and, more recently, George Boas, Brand Blanshard, Gilbert Ryle, and Walter Stace. Father Bochenski is the thirtieth person and the first Scholastic to give the lecture.

## Thirtieth Annual Meeting of the American Catholic Philosophical Association

MAURICE R. HOLLOWAY, S.J., *Saint Louis University*

The American Catholic Philosophical Association held its thirtieth annual meeting on April 3 and 4, 1956, at Cincinnati, Ohio. Greetings were extended to the members by the Most Reverend Karl J. Alter, Archbishop of Cincinnati. The general theme of the meeting was the role played by the various philosophical disciplines in a Catholic liberal education. In his presidential address, "Wisdom and Science," Vincent E. Smith, of the University of Notre Dame, made the point that while metaphysics is valuable in organizing the purely secular knowledges of a Catholic liberal education, it can never organize a Catholic curriculum as Catholic. For this purpose sacred theology is needed, a wisdom whose subject is the God of revelation. The role of logic in such an education was discussed by the Reverend Henri DuLac, also of the University of Notre Dame. Father DuLac saw four principal benefits of logic for the Catholic student: (1) it gains for him confidence in the orderly use of his reasoning power, (2) it gives him a respect for exactness, (3) it helps him to define carefully, and (4) it teaches him to reason in a manner suitable to the subject matter. And Father DuLac pointed out that if sacred theology and philosophy are essential to a Catholic liberal education, the logic on which the learning of them depends is likewise essential. In his paper, "The Meaning of Jean Jacques Rousseau and the Structure of Political Theory" (a most provocative and interesting essay, but one not really on the general topic of the meeting), Father Charles N. R. McCoy, of the Catholic University of America, explained the meaning and import of Rousseau's identification of the autonomy of man's intellect with the autonomy of man's nature. Since nature contains within itself no principle of intelligence, man, as part of the natural cosmos, becomes a center of self-createness that is infinitely malleable, being reduced in the line of his pure autonomy of nature to a simple indeterminateness with respect to some possible form. Such forms will be imposed upon man by the force of revolution and the absolute state; man will no longer be guided by a theoretical intellect with its abstract forms of consciousness, forms which only alienate man from himself and his pure autonomy of nature. What this theory does to the traditional and normative ethics which considers man as a rational animal was briefly highlighted.

In his paper, "The Role of the Philosophy of Nature in Catholic Liberal Education," Father Benedict Ashley, O.P., discussed the precise nature and

method of the philosophy of nature, its relation to and distinction from the positive sciences, and its educational value. The method of demonstration that is proper to the science of mobile and sensible being need not proceed always through intrinsic formal and material causes but may also legitimately proceed through some substitute for these, some sign or effect, or some extrinsic cause. And while such demonstrations fall short of the certitude attained in mathematics and metaphysics, they lead, nevertheless, to conclusions that are genuinely certain. Father Ashley gave as examples the principal theses that St. Thomas derived from such works of Aristotle as the *Physics*, *De Generatione et Corruptione* I and *De Anima*, which are, in the form given them by the Angelic Doctor, genuine demonstrations whose certitude cannot be impugned by the hypothetical systems of positive science. The positive sciences themselves do not aim at certitude and are dialectical instruments of the philosophy of nature, with their roots firmly fixed in the certitudes of this latter science and continuing the same investigations of this science, with its conclusions, however, not becoming confused with the conclusions of philosophy. Finally, Father Ashley maintained, the role of the philosophy of nature in a liberal education is an essential one, since it constitutes an indispensable condition for both moral philosophy and metaphysics. The former borrows principles from psychology, a part of the philosophy of nature; and the latter, while not borrowing any principles from the philosophy of nature and being, therefore, formally independent of it, is, nevertheless, materially dependent on sense experience whence it derives its principles of being. The last part of the paper describes how this philosophical view of science, taking full advantage of the progress of modern science, is gradually introduced to the Catholic student in an experimental curriculum being used at St. Xavier College, Chicago.

Edwin C. Garvey, C.S.B., of the Assumption University of Windsor, in his paper, "The Role of Metaphysics in a Catholic Liberal College," insisted on the following points. (1) Of all the parts of philosophy, metaphysics should be learned last, and it will be learned only with great labor and by a chosen few; hence, a formal course in metaphysics should come in the senior year in college, and be given (for a full year) only to those majoring in philosophy. (2) Metaphysics will play its integrating role if the teacher is inspired by a vision of unity and can lead his students toward this vision, indicating the method and meaning of the main conclusions of metaphysics, preparing the student's intellect for the insights into being as being, which are proper to this science. Until the natural intellect of the student has been properly prepared for the abstract intuition of being as being through courses in logic, the history of philosophy, cos-



mology, psychology, ethics, and so forth, any attempt at an introductory course in metaphysics would result either in empiricism, where metaphysics becomes simply a perceptual experience of existing things, or in common-sense knowledge, lacking ontological insight into the necessities of being as being.

The association address was delivered by Mortimer J. Adler, of the Institute for Philosophical Research, San Francisco. His topic was "Controversy in the Life and Teaching of Philosophy." Mr. Adler submits that philosophers have rarely, if ever, joined issue in any rational debate; for they have really failed to disagree due to a lack of minimal topical agreements that are prerequisites for genuine disagreement. That is to say, they fail to agree on their understanding of the subject under discussion and of the precise question concerning it. Genuine controversies can, however, be constructed from the materials of actual historical controversies, but this requires a method that is quite distinct from the philosophical inquiry itself. This construction, Mr. Adler said, is completely neutral to the truth or falsity of the opinions involved on each side and formulates these opinions in a language and vocabulary acceptable to both sides. The aim of such constructions is to give a true picture of the controversy itself that underlies the diversity of two opposing philosophical doctrines.

In the general business session, held the morning of April 4, a new constitution and bylaws were adopted. The president for the coming year is the Reverend George P. Klubertanz, S.J., and the vice-president is the Reverend Allan Wolter, O.F.M. Next year's meeting will be held on April 23 and 24, in Chicago.

## BOOK REVIEWS

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LEONARD A. WATERS, S.J., *St. Stanislaus Seminary*

*Aesthetics and Criticism*. By Harold Osborne. New York: Philosophical Lib., 1955. Pp. 341. \$6.00.

The author of *Aesthetics and Criticism* is an aesthetician of the psychological school and an enthusiastic admirer of Mr. Cleanth Brooks and "organic unity". He is, also, a man justly alarmed at the "massive befuddlement and obfuscation" everywhere evident in criticism owing to

"sheer muddled thinking" in the aesthetics behind it. Earlier (1952) he wrote a book, *Theory of Beauty*, to propose a "configurational" theory of beauty which he is now supporting by presenting it as the only firm foundation for a consistent and effective criticism.

Mr. Osborne's theory is built upon "the contention that a beautiful work of art is a configuration such that its constituent parts could not have existed except as parts of precisely that whole of which they were in fact parts" (p. 240). These words describe "organic unity" and so indicate the kind of whole which practical criticism must seek to discover in an art work.

I am happily in agreement with Mr. Osborne both in his appeal for aesthetics and in his enthusiasm for "organic unity." It is refreshing to find a critic looking for standards in a fog of relativism, and much that Mr. Osborne writes is new and wise. The criticism I shall make of his metaphysics does not invalidate the great usefulness of the book in its survey of the ordinary schools of criticism and the positive results of psychological research in aesthetics.

"Organic unity" is a romantic word—Coleridge's word, and its implications were originally metaphysical—vaguely idealist, and (through the Schlegels) Aristotelian and Scholastic—but at any rate metaphysical. In modern usage by, and since, the new critics, however, it has lost its metaphysical connotation and has become a scientific word. Science has so completely overwhelmed metaphysics that modern thinkers, even when they decide to explore the ultimate causes of things, succeed in being no more than scientific. This is unfortunately true of Mr. Osborne's analysis, too, since for him metaphysics is neither valid nor useful knowledge. So, in his "Apologia for Aesthetics," he can say, "At one extreme aesthetics merges into metaphysics and to the extent to which it is metaphysical aesthetics is profitless to practise" (p. 25). And, "The traditional method of definition in the philosophy of the humanities is to start with an abstract formulation, conjured out of empty air, which is supposed to delimit the essence or quiddity of the field of phenomena which is to be considered" (p. 41). Thus it is enough to say of any theory as he says of expressionism: "It is subject in all its forms to the basic weakness of all metaphysical theories of aesthetics: it can neither be verified nor serve as a practical guide to criticism" (p. 54). And historically "[Aristotle] also held a teleological view of reality which has practically disappeared from contemporary thought. He believed that everything—including human beings—has a 'form' which both makes it what it is and is the goal of perfection toward which it tends" (p. 94). And, "Throughout the Middle Ages the aesthetic consciousness lay crushed and dormant in all Christendom" (p. 54).

Finally he can write: "Chapter VI ["Hieratic Hedonism"] '*id quod visum placet*'—St. Thomas Aquinas" (p. 111), in which chapter St. Thomas is not discussed. (He is given a one-page "treatment" in another chapter.)

How can Mr. Osborne write *Aesthetics and Criticism*, feeling as he does about metaphysics? The answer is in his "Apologia":

We do not mean to deny the value and legitimacy of such metaphysical theorization for the metaphysician. But aesthetics has suffered too much from premature speculation about the cosmic significance of beauty before anyone has understood what we mean when we talk about beauty or what criteria we may use to detect it. We shall here be concerned only with the surer if more pedestrian range of critical aesthetics.

"Critical aesthetics," then, which does not depend upon metaphysics and yet is the foundation for criticism by being a scientific study of the data of criticism is the meaning of aesthetics in this book.

No one can deny that Mr. Osborne has struck home. What we have suffered from metaphysical theorization is not pleasant to think about. And yet, the great weakness in this book seems to me to be the author's attempt to escape from the metaphysical. Unfortunate as our experience with metaphysics has been, we can no more decree metaphysics for the metaphysicians only than we can restrict the atom to the physicist only. One *must* talk of ultimate reality if he is to be scholarly in a discussion of form, emotion, mimesis, interpretation, and the rest. Conversely, without a metaphysical position, Mr. Osborne is constantly being forced to use the scientific method in conducting analyses which can only be meaningful from a metaphysical viewpoint. Thus, his understanding of Aristotle's "mimesis," for example, is scandalously unscholarly. Imitation means a mechanical copy. A mechanical copy is ridiculous as an explanation of art; and thus a "whipping boy" technique is set up to stigmatize all realists as photographic imitators. The same objection may be taken to the author's view of emotionalists. Because emotions are "autobiographical" and art is "objective," all who speak of emotions as connected with one's judgment of art are simply unscientific. Similarly, the critic who appeals to anything beyond scientific categories is evidently a "transcendentalist" and so self-condemned as a philosopher rather than an aesthetician.

In support of his own configurational theory of "organic unity" Mr. Osborne consistently uses the same scientific method, and it makes mincemeat of a theory that has real metaphysical value and power. Art, in this system, means simply "form or structure or configuration" and beauty is the coefficient of this formal structure (p. 225). Thus art is autotelic—independent of any real life object and of any viewer's emotions. However, a



work must have "the right kind" of structure if it is to be beautiful. The right kind is organic. But at this point science leads to confusion. How are we to know the right from the wrong kind of structure, and why is organic the right kind? Science leads the author to believe that no two men ever actuate the same poem; so it is manifestly no more than a theoretical question to ask how we may know organic form when we see it (p. 233). And to get at the question of why organic unity is beautiful, science might suggest a "tropism"—an instinctive and alogical desire for configuration (p. 227); but the author goes beyond this to suggest that the experience of beauty is valued "because it makes us more vividly alive than we otherwise know how to be" (p. 229). Evidently the whole question of the relation of reality to the mind and the whole human reaction—intellectual, imaginative, emotional—to a bit of reality is back again. It must return. Art inevitably involves metaphysics, and a scientific analysis is not merely incomplete; it is false.

As long as *being* in itself is not recognized as the only satisfying object of the human intellect, the fatal dichotomy of man and object is introduced. I am forever isolated and things are forever apart from me, foreign, and incapable of moving me. Until the human grasp of things is presented as a knowledge and simultaneously a love of them, a wedding in which the mind becomes one with the thing known, beauty will forever elude us. The scientist can categorize. He can list qualities and reactions, set up any number of elaborate and strictly observed recordings of data. But the appeal of beauty will forever be uncategorized. It transcends all categories; it is felt intuitively in the first direct grasp of reality and it continues to be felt in the same way through the most complex experience of art. If this is what Mr. Osborne calls "mysticism" then beauty is mystic. But in no scholarly estimate is this to be confused with that real or assumed direct spiritual grasp of spirit outside the normal process of knowing. This is simply the fullness of the normal process. Grasp of beauty is grasp of beings with their full capacity to possess, to wed, to fecundate the human spirit in a state of joy and satisfaction which is part of the mystery of man himself.

Finally, to have no metaphysics is to have no certitude with which one may speak of form and matter as principles of being itself. And it is with *being* we must deal when we criticize artefacts as beautiful or ugly. With no tools but scientific categories one is bound to fall into the error of talking about form as if it were no more than external structure, and content as if it existed in the art work apart from the form in which it is apprehended. It is ridiculous to speak as if the content made no difference in art; but it is perfectly true, as A. C. Bradley says, that it *settles* nothing

in art. Likewise, no category of structure can ever be isolated such that it defines or specifies beauty in itself. But if "form" is metaphysical form, a principle of the being itself and inseparable from the matter, then "organic" form or organic unity can never be discussed as a category of things. It is simply the denial of any category, any mechanical or mathematical structure which is adequate to describe the beautiful thing. It is organic in that it is "natural," "live," rather than an abstraction of the mind.

In all of this Mr. Osborne is as anxious as I to preserve the wholeness, the immediacy, and the intuitive quality of art experience. "Organic unity" we are both defending. His chapters written against "realists," "emotionalists," and even "transcendentalists" are inadequate simply because his scientific viewpoint forces him to say, or to seem to say, that neither reality nor psychology can be concerned in the analysis of beauty. Rather, because reality is wedded to mind in the grasp of beauty, any theoretical position which parts them is wrong. A metaphysical position will strengthen "organic unity," not by setting it up in isolation as a rival to realism or transcendentalism, but by refusing to let any particle of impression, expression, imitation, or analysis of art be isolated from the whole, human, vital unique experience which is the art experience. In this way criticism can be permanently clarified and supported by aesthetics.

JAMES COLLINS, *Saint Louis University*

*L'Analytique transcendantale de Kant. Tome I, La Critique kantienne.* By A. De Coninck. Louvain: Publications Universitaires, 1955. Pp. 327.

The plan of this book is to introduce us to Kant's critical philosophy in its main lines. The author does this by analyzing the first two sections of the *Critique of Pure Reason*, the transcendental aesthetic and the transcendental analytic. There are two usual ways of going about the task of initiating students to this book. One is to make a strict commentary on the topics in their actual order of introduction in the text, and another is to discuss in a systematic way certain major themes which it would be well to know before plunging into the reading of the original source. De Coninck has happily chosen to employ both these methods, first giving a general explanation of Kant's position and then offering a brief commentary on the actual text.

The general explanation gives a preliminary orientation in Kant's standpoint. It describes concisely the point of departure of the first *Critique*

in a certain view of human knowledge, its objective of explaining the conditions for making valid synthetic a-priori judgments, and its method of transcendental analysis. On each point a common procedure is followed. First a summary statement is made of the Kantian doctrine; then a number of illustrative texts from Kant himself are furnished; and finally a more detailed study is made of the aspects of the problem. Perhaps a fifth of the book is reserved for source readings, which are usually given both in the original and in the author's translation, in parallel columns. For the French student, these readings provide an invaluable invitation to approach the original work. And since the author is very conscientious in his translations, they will be interesting to anyone concerned with finding foreign equivalents for the Kantian terminology. There are also eleven scholia, in which the chief variant meanings are established for such key terms as "transcendental," "objective," "experience," "matter-and-form," and "perception."

In the commentary portion, the author concentrates upon the basic argument, avoiding fine questions pertaining to textual interpretation, Kant's own development, and controversies among the commentators. The meaning of space and time, the two deductions of the categories, and the schematism and principles of the understanding comprise the expected main divisions. Enough information is given to enable the student to take his first bearings in Kantian criticism without plunging him into the bewildering sea of special problems which the text of Kant contains. The approach is almost wholly that of sympathetic exposition, although there are a few instances of critical comment. De Coninck remarks on the ambiguous reference to perception, experience, and objectivity and suggests that Kant sometimes takes unacknowledged advantage of the common realistic meanings. But for the most part, Volume 1 is a straightforward exposition; in a second volume, the author intends to offer his critical estimate of Kant.

After acknowledging the usefulness of this introduction within its announced limits, it is nevertheless necessary to examine the limits themselves. De Coninck seeks to explain the *Critique of Pure Reason* solely in terms of the aesthetic and the analytic. Although this has been a long-standing tradition among Kantian scholars, there are definite signs recognizing its inadequacy. The trend lately has been to restore to its rightful place of importance the third section of the *Critique*, the dialectic of pure reason, and even to acknowledge the indispensable contribution made by the final part, the doctrine on method. These are not mere applications of the Kantian critique but vital and determining portions of it. They help to finalize the entire work, to give it proper proportions, and to show its



internal relation with the second and third *Critiques*. The imbalance resulting from omission of the dialectic from an introduction to the Kantian critique can be observed in the present work. It finds no occasion to explain the meaning of ideas of reason, the thing-in-itself, dialectic, the kinds of possibility, and the distinction between intuition in general and human intuition. And it gives no guidance to the Kantian arguments on the world, the soul, and God. But these are not peripheral topics. They bring us to the heart of the critical enterprise, and hence some mention of them in a formal way is desirable in an introductory work. In this respect, the recent English commentary by H. W. Cassirer provides a more balanced guide.

MICHAEL MONTAGUE, S.J. *West Baden College*

***Morale fondamentale.* By Dom Odon Lottin, o.s.b. Tournai: Desclée & Cie., 1954.**

A book in moral theology would not ordinarily be reviewed in the pages of *THE MODERN SCHOOLMAN*. But Dom Odon Lottin's *Morale fondamentale* is no ordinary book in moral theology. One of the finest historians of the theological and philosophical thought of the Middle Ages has given us a work which remembers that theology—even moral theology—must live within its natural context of philosophy and dogmatic theology.

The moral theology of many of the Scholastic manuals is often a rootless amalgum of propositions, opinions, and corollaries, capsulized for handy use by the busy confessor. If such works have a place, it is not that of a substitute for moral theology as a science which is both theoretical and practical. The present work takes both aspects into account.

Morality is a relation of conformity or nonconformity between a human act and the norms of morality. Moral theory, which comprises the first four chapters of this book, treats of the human act from the psychological point of view (Chap. 1), with its fundamental property of imputability (Chap. 2), the norms of morality (natural reason, positive law, eternal law, conscience, grace, and faith) (Chap. 3), and the relation between the two which constitutes morality (Chap. 4).

Moral practice, dealing with the problem of organizing a life in conformity with moral theory, works through the formation of the judgment of conscience (Chap. 5) and the formation of the prudential judgment in accord with the natural and supernatural virtues (Chap. 6), to a consideration of sin (Chap. 7) and merit (Chap. 8). The outline is neat and has the tremendous advantage of a presentation which is pedagogically use-

ful as well as methodologically sound. Theology and philosophy, though integrated, remain distinct.

The question of *method* is an important one; and though Lottin is brief in his remarks, he says some things which definitely need to be said.

Moral philosophy is most frequently viewed as a science which is synthetic in structure and deductive in method. Extrapolating from the God of natural theology, many Scholastic ethicists begin by studying the God of natural theology under the aspects of the ultimate norm of good and evil, the foundation of all moral obligation, and the supreme sanctioning source of moral conduct. The remainder of "general ethics" is deduced from these premises. The difficulties with such a deductive procedure are serious. In making moral science a mere corollary of natural theology, one runs the danger of robbing moral science of its autonomy as a special philosophical science. It is true that metaphysically the moral order, as every created order, is dependently related to God. Nevertheless, one cannot conclude that one's knowledge of the moral order depends in its beginnings on a knowledge of God. Conscience offers us a direct and proper knowledge of the first notions in the moral order without appeal to our indirect and analogical knowledge of God. It is true that God is man's last end; it is true that an act is morally good if it is conformed to that last end. But a knowledge of God does not furnish a criterion for knowing whether a particular act is or is not conformed, is or is not obligatory. Furthermore, the philosopher cannot deduce the content of natural law from his essentially imperfect knowledge of the eternal law. Even if this were possible, it would still mislead one into thinking that natural law is imposed entirely from without, a mere participation in eternal law. This moral extrinsicism is simply false and shows up particularly in treating sanction as a reward or punishment imposed from without and tacked on to the moral life. I am not certain, but I suspect that such a deductive procedure in moral philosophy is possible only because of a correspondingly faulty procedure in natural theology.

Lottin chooses—and correctly, I think—to construct a moral philosophy which is methodologically inductive and analytic. This is not to turn ethics into a kind of social physics (after the manner of Durkheim and Levy-Bruhl), whose value would consist only in deciphering the laws which actually have governed the evolution of society and predicting future developments. Moral philosophy is not primarily historical or prophetic.

Moral science must begin with man's experiential contact with the real. Every man possesses a number of spontaneous judgments bearing on the morality or obligation of ordinary acts. These spontaneous judgments lie open to a reflection which analyzes and uncovers the impersonal and im-

mediate norms of morality grounding these judgments. To reach the ultimate foundations of moral goodness and obligation, this inductive analysis must push to its term in God, the exemplar of all morality and obligation. In such a method, however, God is no longer the point of departure but the term.

Though Lottin is writing as a moral theologian, not as a moral philosopher, he believes that in presenting moral theology this inductivo-analytic method of moral philosophy is pedagogically preferable to the deductive method proper to moral theology as a science. The advantages of this procedure are evidenced throughout the book. For example, by working through the psychological structure of the human act in the opening chapter, Lottin has provided the means for an intelligent classification of internal sins (*gaudium* is the *fruitio*; *desiderium*, the *intentio*; *delectatio morosa*, the simple volition). The number and species of sins have their basis in the efficient and formal causalities of will and intellect.

The actual analysis of the human act in its various stages is presented in summary form; and for further discussion one must still return to Lottin's earlier studies in the first volume of his *Psychologie et morale aux XIII<sup>e</sup> et XIV<sup>e</sup> siècles*. The intellect-will relationship is placed in the categories of efficient and formal causes respectively, but no further questions are asked about the types of formal causality (intrinsic or extrinsic) involved. Nor is much attempt made to differentiate the intellect-will relationships as they shift in the various stages of the human act. Reason becomes practical under the influence of the will. The unity of the human act comes from the perduring causal influence of the volitional intention through all the metaphysical moments to the terminal fruition.

Lottin thinks that the well-known schema of Father Gardeil in the *Dictionnaire de théologie catholique* of the twelve steps in the psychological process is overly rigid. There is, after all, a consent which is involved in the simple volition as well as in the intention; there can be a command prior, as well as posterior, to choice. Lottin does not look on the act of choice as a composite act of judgmental and volitional elements. The decisive judgment, chronologically prior to choice, can exert its causality on the choice only because of the virtual influence of the intention which directs both intellect and will. There are no reciprocal causalities within the choice itself.

This practical judgment determinative of choice is not the same as the judgment of conscience. The judgment of conscience precedes choice and perdures after the choice, thus embracing the whole field of the activity of natural reason. Nor is this judgment of conscience to be identified with the impersonal, objective, reasoned judgment of right reason (*recta ratio*



is an equivocally ambiguous term). The judgment of conscience corresponds to the judgment of *synesis*, while the judgment of election is the command preceptive of choice. Lottin restates the position he had maintained in his *Principes de morale* on the distinct roles of prudence and conscience, and attacks rather forcefully (and successfully) Deman's recent attempt to absorb conscience into prudence. The formation of the judgment of conscience is not directed by prudence, which enters for the first time into the prudential command immediately preceding choice.

Though this book is not historical, it contains many historical discussions, especially in the notes at the end of each chapter. The majority of these are but summaries of Lottin's fuller investigations reported in his earlier works. The book itself is theological and philosophical, and it is theology and philosophy of a high order. It proves once again, if proof is still needed, that the best theologians and philosophers are those who were first of all thorough-going historians of theology and philosophy.

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## FATHER MERSENNE'S WAR AGAINST PYRRHONISM

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One of the most important and most neglected figures in the history of modern philosophy is Father Marin Mersenne.<sup>1</sup> He has been categorized, though unfairly, as a bigoted religious figure who is remembered primarily because of his life-long friendship with René Descartes. However, this picture hardly corresponds with the vital role Father Mersenne played in the scientific revolution of the seventeenth century.

Mersenne was a polemicist against a host of "monsters" that arose in the late Renaissance—atheists, deists, alchemists, naturalists, Cabalists, and Pyrrhonists. He was a man with a voracious interest in various scientific and pseudoscientific questions ranging from complex problems in physics and mathematics, Hebrew philology, theory of music, to such problems as the height of Jacob's ladder and the reason why wise men earn less money than fools. The service Mersenne rendered to the development of the "new science" was probably unequalled in his day. He published a vast number of summaries, explanations, and systems of scientific works, including those of Galileo. He aided and abetted Gassendi, Hobbes, Descartes, Herbert of Cheshire, and many others in their work. During his lifetime, Father Mersenne functioned as a one-man society for the advancement of science through his publications and immense correspondence in which he kept the leading European scientists informed of each other's work.

Mersenne was born in 1588 and was one of the first to be trained at the Jesuit college at La Flèche. He then entered the order of the

Minims, where he became a model of Christian piety and wisdom. In the third decade of the seventeenth century he began publishing vast polemical tracts against every conceivable enemy of religion and science. Following this, Mersenne devoted himself to the more constructive task of being a propagandist for the "new science." Until the time of his death in 1648, he exhibited his love of God through his Herculean labors in furthering the scientific revolution. The official biography of Mersenne, put out by his religious order, quoted one of the tributes paid to him, which said that only Mersenne and Gassendi, of all of the mathematicians of the day, rivalled Euclid and were legitimate successors of Ptolemy.<sup>2</sup>

The long neglect of Mersenne has recently been corrected by the excellent study by the Abbé Robert Lenoble, entitled *Mersenne ou la Naissance du Mécanisme* (Paris, 1943). In this work, Lenoble argues that Mersenne was not only one of the major figures in the philosophical and scientific revolution of the seventeenth century but was also the first to state the positivistic-pragmatic conception of scientific knowledge, by offering a nonmetaphysical interpretation of the "new science." The honor of being the first of the moderns, traditionally given to Francis Bacon or René Descartes, Lenoble declares, belongs more properly to Marin Mersenne. By means of a thorough examination of Mersenne's writings, Lenoble offers ample evidence to support this astounding thesis. His argument is quite convincing, though a somewhat similar claim could probably be made out for Mersenne's good friend and contemporary, Petrus Gassendi.

Mersenne's novel views concerning the philosophy of science are carefully developed in Lenoble's study, which describes how Mersenne rejected completely the notion of a rationalist physics and mathematics which grounded our knowledge of nature and numbers on some metaphysical foundation guaranteeing its truth. Instead he offered a new theory of science and mathematics, in which science consisted of a

<sup>1</sup>I should like to express my gratitude to M. l'Abbé Robert Lenoble for his helpful suggestions, criticisms, and encouragement. Also, I am indebted to Dr. Theodore Waldmann, who read the manuscript, for his critical comments.

<sup>2</sup>F. Hilarion De Coste, *La Vie du R. P. Marin Mersenne Theologien, Philosophe et*

*Mathematicien de l'Ordre des Peres Minimes* (Paris, 1649), p. 42.

<sup>3</sup>*L'Impiété des Deistes, Athees, et Libertins de ce temps, combatuë, & renversee de point en point par raisons tirees de la Philosophie, & de la Theologie* (Paris, 1624).



series of hypothetical judgments based on observations, connected in a systematic logical-deductive structure. This body of propositions could never be known with certainty to describe the "true nature of things." Science is the way in which we deal with the world of appearances. Men have to act regardless of what the real nature of things might be. Similarly mathematics is not knowledge of a transcendent reality but a system of deductive relationships about possibilities that might obtain. The theorems of geometry are true *if* there are such things as points, lines, and planes in the world.

It is not the purpose of this paper to examine this picture of Mersenne's philosophy of science but rather to consider one of Lenoble's sub-theses about it; namely, that Mersenne's novel interpretation of scientific knowledge constitutes a refutation of Pyrrhonian skepticism. In one of Mersenne's works entitled *La Verité des Sciences contre les Septiques* [sic] *ou Pyrrhoniens* (Paris, 1625), in which he discussed philosophy of science, he claimed to demolish skepticism by means of his analysis of science and mathematics. What I shall try to show, through examining Mersenne's war against Pyrrhonism, is that the attack presented and the philosophy of science advocated constitute in fact a type of skepticism which lies at the heart of what may be called "the scientific outlook," and that it is this new type of skepticism, a "constructive Pyrrhonism," that is one of Mersenne's most important contributions to modern thought.

The battle with the skeptics came at the end of Mersenne's polemical period (1623-25), during which he had written some enormous tomes like the *Quaestiones celeberrimae in Genesim* (Paris, 1623) and *L'Impieté des Déistes, Athées et Libertins de ce temps*<sup>3</sup> in order to destroy various types of infidels, heretics, and free-thinkers by means of argument and abuse. The work against the skeptics, *La Verité des Sciences*, completes this series of tracts against the enemies of reason and religion, and reflects some of the agitation of the time to stop the rising wave of Pyrrhonian thought.

Mersenne's polemic against the skeptics is one of the early attacks in the first half of the seventeenth century, which was followed by many, many others from thinkers who were impressed or depressed

#### *Father Mersenne's War against Pyrrhonism*

Richard H. Popkin

by the success of the revival of Greek skepticism.<sup>4</sup> Whereas most of the refutations were directed against the views of Montaigne and his disciple, Pierre Charron (with whom Mersenne had dealt in *L'Impiété des Déistes*), *La Verité des Sciences* considers the views of Sextus Empiricus, which appeared in Paris in 1621. They had just been published in Greek and Latin and were apparently creating quite a stir in the learned world. In examining the basic form of the skeptical arguments in their most didactic presentation, Mersenne tried to offer a different approach to these old problems. Instead of answering the skeptics in terms of the Aristotelian theory of knowledge, as was usually done, he attempted to show that a proper understanding of the sciences and mathematics, in terms of the "new philosophy," would vitiate the force of the Pyrrhonian doubts.

Mersenne's book begins with an extremely bombastic letter to the brother of the king. In this epistle, Mersenne announced that he was attacking the enemies of the truth of the sciences, the skeptics, the *libertins*, who are unworthy to be called human beings. Since they are unable to support the light of truth, they sacrifice themselves shamefully to errors and limit all human knowledge to the senses and to the external appearances of things. They reduce us, Mersenne con-

<sup>4</sup>See, for example, Jean Bagot, *Apologeticus fidei* (Paris, 1644); Pierre Chanet, *Considérations sur la sagesse de Charon* (Paris, 1643); François Garasse, *La Doctrine curieuse des Beaux esprits de ce temps, ou pretendus tels* (Paris, 1623), and *La Somme theologique des veritez capitales de la religion chrestienne* (Paris, 1625); Jean de Silhon, *Les deux Veritez, l'une de Dieu et sa Providence, l'autre de l'immortalité de l'Ame* (Paris, 1626), and *De l'Immortalité de l'Ame* (Paris, 1634); Charles Sorel, *La Science des Choses Corporelles* (Paris, 1634); Yves de Paris, *La Theologie naturelle* (Paris, 1633-36).

<sup>5</sup>"Ils s'appellent Septiques, & sont gens Libertins, & indignes du nom d'homme qu'ils portent, puisque comme oyseaux funestes de la nuit n'ayans pas la prunelle assez forte pour supporter l'éclat de la verité ils sacrifient honteusement au mensonge, & bornans toute la conoissance des hommes à la seule portée des sens, & à l'apparence extérieure des choses, nous

ravalent indignement à l'état le plus vil, & à la condition la plus basse des bestes les plus stupides & nous depouillent de l'usage de tout veritable discours, & ar-raisonnement" (Mersenne, *La Verité des Sciences*, in dedication to Monsieur frère du Roy, p. 2).

<sup>6</sup>Lenoble suggested that Mersenne wrote the work between chats with Naudé and La Mothe Le Vayer. Lenoble, *Mersenne*, pp. 193-95.

<sup>7</sup>See, for example, the bombastic works of Father Garasse cited in n. 4, as well as Jean Boucher, *Les Triomphes de la Religion Chrestienne* (Paris, 1628); and Charles Cotin, *Discours a Theopompe sur les Forts Esprits du Temps* (1629).

<sup>8</sup>Mersenne, *La Verité des Sciences*, preface, p. ii.

<sup>9</sup>*Ibid.*, preface, p. iii.

<sup>10</sup>*Ibid.*, pp. 1-11.

<sup>11</sup>"Ce peu de science suffit pour nous servir de guide en nos actions" (*ibid.*, p. 14).

tended, to the most vile state, to the condition of the lowest and stupidest of beasts, depriving us of all discourse and reason.<sup>5</sup> This is rather forceful language, especially for a man whose good friends, Gabriel Naudé, François de La Mothe Le Vayer, and Petrus Gassendi were avowed skeptics.<sup>6</sup> But compared to some of the charges made at the time,<sup>7</sup> Mersenne's remarks are somewhat restrained. The preface, however, goes further, adding more charges, claiming that the skeptics are those *libertins* who are afraid to show their impiety and hence go about in a devious fashion attacking the sciences, religion, and morality by trying to convince us that nothing is certain.<sup>8</sup>

The purpose of his huge tome, Mersenne said, is to stop the impetuous course of Pyrrhonism. Any skeptic who reads it will see "that there are many things in the sciences which are true, and that it is necessary to give up Pyrrhonism if one does not want to lose his judgment and his reason."<sup>9</sup>

To achieve this aim, the book presents a dialogue between three philosophers—an alchemist, a skeptic, and a Christian philosopher. The alchemist starts the discussion by stating that alchemy is *the* perfect science. The skeptic rebuts, first by attacking alchemy and then by developing an assault on human knowledge in general through maintaining that no one knows what things really are in themselves. A summary of the classical Pyrrhonian case is offered, claiming that we see only appearances of things, not their real natures, essences, or Platonic Forms. We perceive only effects, whereas genuine knowledge depends upon causes. The number of causes of anything can be traced back *ad infinitum*. We cannot even know individual entities from which to abstract knowledge, since we do not know the causes that explain any individual thing. To know even a piece of paper, one would have to know the entire universe because all the relations in which the paper is involved are part of knowing the paper.<sup>10</sup>

At this point, the Christian philosopher makes his first reply, pointing out that all that the skeptic has shown so far is that we know few things rather than that we know nothing. And this limited knowledge, even if it is restricted to effects rather than causes, has a pragmatic value, for "this little knowledge suffices to serve as a guide in our actions."<sup>11</sup> All that we have to know to get along in this world are

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the effects, since by them we can distinguish various things from one another. Thus, these initial skeptical arguments are inconsequential.

Next, some of the classical sense-variation arguments of the Pyrrhonists are introduced. But the Christian philosopher shows that even if our sense experiences differ from those of other animals and other humans, we can at least discover certain laws about sense observations which constitute a science of sorts. This science will not deal with things-in-themselves but with laws about how objects appear under various conditions, like the laws of refraction. Such laws will allow us to correct our sense observations.<sup>12</sup> And the variations in moral and religious behavior prove nothing since both natural and divine rules of conduct are known to us.<sup>13</sup>

The skeptic's appeal to the diversity, relativity, and mutability of human views in the sciences and in religion<sup>14</sup> fails to raise serious doubts. Regardless of the variations in experience and opinions in every field of knowledge, some things are known to be true; for example, that the whole is greater than the part, that the light at noon is greater than that of the stars, and that it is not possible for the same thing to both have and not have the same property. In physics, nobody really denies that there are some things in the world—bodies, motions, light, and so on. We may all judge differently, but we all agree that there is something to judge. In ethics, there are undoubted principles like "evil should be avoided, good sought." The diversity of moral theories is due to mistakes or to difficulties about trivial problems, but not to doubts about these basic principles. A Pyrrhonian who doubts these obvious rules of morality is heading for disaster, into libertinism, which leads headlong to eternal damnation. If one becomes reasonable about these matters, one will know something, be happy, and even eliminate religious disputes. Here the Christian presents a summary of the evidence for his religion (to which the

<sup>12</sup>*Ibid.*, pp. 16-20. In this section Mersenne also pointed out that the skeptical tropes dealing with animal perception are irrelevant, since we have no way of telling what animals perceive.

<sup>13</sup>*Ibid.*, p. 21.

<sup>14</sup>*Ibid.*, pp. 22-40.

<sup>15</sup>*Ibid.*, pp. 41-74.

<sup>16</sup>*Ibid.*, pp. 75-129.

<sup>17</sup>"Cela n'est . . . pas nécessaire pour établir quelque vérité" (*ibid.*, pp. 150-51).

<sup>18</sup>*Ibid.*, pp. 133-56.

<sup>19</sup>"Tous les discours des Pyrrhoniens ne sont autre chose que chicaneries, & paradoxes, auxquels il ne faut pas s'amuser plus long temps" (*ibid.*, p. 153).

<sup>20</sup>*Ibid.*, pp. 156-62.

skeptic replies that he too is a good Catholic, but he is also still a Pyrrhonist.)<sup>15</sup>

After a temporary change of topic to attack alchemy,<sup>16</sup> Mersenne then developed his answer to skepticism in detail as a commentary and refutation of almost all of Book I and a part of Book II of Sextus Empiricus's *Outlines of Pyrrhonism*. First the material of Sextus (Book I, chaps, 1-13) is briefly summarized. Then the ten tropes are each presented and refuted in terms of a more extended version of what has already been said; that is, that there are scientific laws about sense variations, such as the principles of optics, and that in spite of all disagreement and divergence of opinions, there is common agreement on some matters. No one really doubts that fire is hot or ice is cold or that an elephant is bigger than an ant. Even the problems raised by the skeptics about dreams and frenzies, which Descartes was to make so much of, are dismissed by merely pointing out that when we are awake and in sound mental condition, we recognize dreams and hallucinations for what they are.

The skeptics claim that the ten tropes show that we do not know the essences of things. The Christian philosopher shrugs this aside with a pragmatic reply, "That is not . . . necessary to establish some truth."<sup>17</sup> In spite of the cases offered by Sextus Empiricus, we do not happen to be in doubt about everything because we have means of dealing with the problems, like measuring devices, and we have truths that we do not in fact doubt. We discover laws of perspective, of refractions, of the effect of wine on eyesight, and so on, and hence do not become disturbed about such things as bent oars and round towers. And by being reasonable, we discover ways of living in spite of the variations in moral behavior.<sup>18</sup> Hence, the Pyrrhonian arguments do not have to be taken seriously.<sup>19</sup>

The Pyrrhonist is not silenced by this commonsensical rejection of his arguments. He offers no rebuttal but instead presents a summary of the remaining materials of Sextus, Book I, the claims that everything is a matter of controversy, that every attempt to establish the truth of a theory leads to an infinite regress or to circular reasoning, and so on.<sup>20</sup> The alchemist offers the first rejoinder to this, pointing out that many of the alleged controversies are due to what stupid philoso-

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phers—deists, heretics, schismatics, and Rabelais—have said. And, in spite of the weird views of some people, as has been pointed out several times already, some matters are never actually disputed. No infinite regress occurs in explanations, because some matters are self-evident. Our knowledge of things can be shown to be reliable by our ability to verify predictions we make on the basis of what we know. Thus, for example, we predict that from our knowledge of the outside of a house there is an inside; and from our knowledge of the actions of the body, that there is a soul. Hence we can build up a science from evident maxims and from experience. Therefore, the Pyrrhonian conclusion is not necessary.

The Christian philosopher joins in at this point, saying that all that is needed to refute the skeptic is to produce some indubitable syllogisms, where the premises are generally accepted. After several examples are offered,<sup>21</sup> the Pyrrhonist counters by stating two arguments from Book II of “notre Sexte,” the argument against the syllogism and the problem of the criterion. For a conclusion in a syllogism to be true, its premises must be true. To show the premises are true a proof is required; otherwise why accept the premises? This leads either to an infinite regress or to using the conclusions as evidence for the premises. Also, there is a vicious circle involved in syllogistic reasoning. The truth of the conclusion is shown from the truth of the premises. But the premises could not be known to be true unless the conclusion were antecedently known to be true (the problem later raised by J. S. Mill). Lastly, it has to be shown that there is a connection between the premises and the conclusion, and that there is a connection between the connection and the syllogism, and so on.

In addition, a judge and a criterion of judgment are needed to tell if something has been demonstrated. But who or what is to judge who or what the judge is? And on what criterion will it be decided what the criterion is? Our senses are unreliable. We cannot tell if understanding is to judge matters and so on. Until all this can be settled,

<sup>21</sup>Including the syllogism: Everything that passes from one place to another, moves; the sun passes from one place to another; therefore, the sun moves (*ibid.*, pp. 163-69).

<sup>22</sup>*Ibid.*, pp. 179-89.

<sup>23</sup>*Ibid.*, pp. 190-95.

<sup>24</sup>*Ibid.*, pp. 196-200.

<sup>25</sup>*Ibid.*, pp. 201-4.



we cannot know the true nature of things but only how they seem to us.<sup>22</sup>

The Christian philosopher answers the latest skeptical barrage by offering a pragmatic version of Aristotle's theory of the proper conditions for obtaining empirical and intellectual knowledge. Without giving any argument, Mersenne's spokesman announces that, in fact, man is the judge of truth and that each human sense is the judge of its own objects. When we perceive sunlight at midday, we know it is day, and no argument about criteria or judges makes any difference. By using our faculties properly, we will discover *maxims veritables*, which all people accept. It is not necessary to show indubitably what the criterion of truth is in order to be sure that these *maxims veritables* are true. As a matter of fact, our reasoning faculty is our criterion; and our sense information, our rules, and our instruments are judged by it. We are not confused by sense illusions, since, by using instruments like a compass and then by rationally evaluating the information obtained, we may reach our proper conclusions about the nature of objects.<sup>23</sup> The analysis does not disprove the skeptic's claims but only shows how the problem is, in fact, dealt with.

The various Pyrrhonian points about the validity of demonstrations are ignored, except for the charge that syllogisms always contain vicious circles. It is simply not the case, we are told, that the conclusions constitute some of the evidence for the premises. The conclusions may lead us to discover the premises but not to prove them.<sup>24</sup> The evidence for the premises is either inductive from other materials than the conclusion or is the self-evidence of the premises. If the skeptic actually doubts that there are premises that "ravish" the understanding and lead it to certain conclusions, can he doubt also that he knows that he doubts? If he doubts this, can he doubt that he doubts, and so on? No matter how the skeptic turns, Mersenne's spokesman insists, he will have to admit that something is true. Hence—"it is necessary to bid an eternal good-bye to your Pyrrhonism."<sup>25</sup>

The skeptic makes no reply but instead digresses to consider some views of Francis Bacon. The disputants then discuss whether Bacon is right in rejecting the syllogism. Mersenne criticized the English philosopher for being sometimes too skeptical and sometimes not

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skeptical enough. The force of the Idols depends on imitating the skeptics. But these kinds of arguments can be answered, we are told (presumably as has previously been done against the Pyrrhonists.) On the other hand, Bacon's positive procedures for discovering the truth are unworkable. First of all, they are not based on what occurs in contemporary science; but more important, in analyzing experience, we never actually find the true nature of things, as Bacon hoped we would. No matter what phenomena we consider, we cannot penetrate to the inner natures of things because our senses, without which our understanding knows nothing, perceive only the external characteristics of objects.<sup>26</sup> Hence, the schemes of Francis Bacon can be set aside.

The first book of *La Verité des Sciences* concludes with a few further comments on Sextus, dealing with his views on physics and metaphysics, which are written off as captious, sophistic, and too feeble to require refutation. The alterations in material things do not prevent us from knowing something, since we know at least that there are alterations. And by employing proper precautions, we can diminish the possibility of sense deceptions about these matters.<sup>27</sup> Hence, one must not suspend judgment. One must accept the truth as the greatest treasure that one can receive. If not, one will live in perpetual darkness with no consolation.<sup>28</sup>

After the first book treating the problems of skepticism, Mersenne turned to his ultimate refutation of Pyrrhonism—a confrontation of the skeptic with the truths that are known. Although the skeptical difficulties may be fundamentally unanswerable, a pragmatist solution to the problem may be possible. When one examines the amazing quantity and structure of things known, can one still remain a skeptic? And so, approximately the last eight hundred pages of *La Verité des Sciences* is a list of what is known in mathematics and mathematical physics, matters on which there is no need for suspense of judgment. Arithmetic, geometry, and other branches of mathematics are de-

<sup>26</sup>"Or quelques Phenomenes qu'on puisse proposer dans la Philosophie, il ne faut pas penser que nous puissions pénétrer la nature des individus, ni ce qui se passe interieurement dans iceus, car nos sens, sans lesquels l'entendement ne peut rien conôître, ne voyent que se qui est exterieur" (*ibid.*, p. 212). The discussion

of Francis Bacon is on pp. 205-18.

<sup>27</sup>*Ibid.*, p. 219.

<sup>28</sup>*Ibid.*, p. 220.

<sup>29</sup>*Ibid.*, p. 730.

<sup>30</sup>*Ibid.*, p. 751.

<sup>31</sup>Lenoble, *Mersenne*, p. 32.

<sup>32</sup>*Ibid.*, pp. 310-33.

veloped and examined. Some rather amazing digressions occur into the philosophy of mathematics, the source of mathematical truths, and the relation of mathematics to nature and to God. The effect of this presentation of the body of then known mathematical disciplines is to silence the skeptic's doubts completely and to force him "to say adieu to Pyrrhonism."<sup>29</sup> The skeptic has discovered in mathematics the most excellent means of overturning all his arguments and returning him to common sense.<sup>30</sup>

What is the character of this refutation of skepticism that Mersenne labored upon so long? Lenoble has described it as akin to Diogenes's refutation of Zeno's denial of motion, by merely walking around.<sup>31</sup> Pyrrhonism has been rebutted not so much by answering its arguments as by exhibiting what we know. Lenoble argues that this is a genuine refutation that contains the basis for the modern "scientific outlook," in that Mersenne considered science as the study of phenomenal relationships apart from any metaphysical foundation or causes.<sup>32</sup> I shall argue instead that Mersenne did not actually refute Pyrrhonism but rather adopted a form of it, a constructive skepticism in opposition to the destructive humanistic Pyrrhonism of some of his friends. And it is this constructive skepticism rather than any refutation of the Pyrrhonian arguments which forms the basis of the "scientific outlook."

In various works, Mersenne admitted to a kind of "epistemological" Pyrrhonism. In *La Verité des Sciences* he never claimed that we possess any true knowledge, in the sense that we know either some absolutely certain first principles or some knowledge demonstrated from them. The "real" natures of things are always hidden and cannot be uncovered. When not attacking skeptics, Mersenne could say this quite bluntly. In his *Les Questions Theologiques, Physiques, Morales, et Mathematiques* (Paris, 1634), it is argued that a science of eternal truths is not possible and that the summit of human wisdom is the realization of our own ignorance. One will always have to confess that he knows no satisfactory reasons for his beliefs, nor can one give any that are so certain that they cannot be doubted. This may discourage and silence wise men and make them despair of ever reaching any infallible knowledge of the works of nature or of things

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in themselves. No wise man would pretend to know any subject with sufficient evidence and certainty to be able to establish a science of it. For we perceive only the outside, the surface of nature, and can never know the interior. We can only have a science of the external effects of things, without ever being able to know the reasons for them, unless it pleases God to deliver us from this misery by giving us illumination.<sup>83</sup>

The same skeptical view is presented in the *Questions Inouyes ou Recreation des Sçavans* (Paris, 1634), in answer to the question (XVIII), "Can one know anything certain in physics or mathematics?" In physics not even the causes of the most common effects can be known, like the causes of light, of falling bodies, and so on. It cannot even be demonstrated that the world we see is not just mere appearance. And hence Mersenne concluded that "there is nothing certain in physics, or there are so few things certain that it is difficult to state them."<sup>84</sup> In the realm of mathematics, truths are only conditional; that is, if there are objects like triangles, then the geometrical theorems are true.<sup>85</sup>

The refutation of skepticism offered by Mersenne never denies this fundamental epistemological Pyrrhonism. The appeal in *La Verité des Sciences* is to two claims, one that in spite of the force of the skeptical arguments, we have means for deciding many of the problems at issue, and the other, that in spite of all the insoluble doubts, we do in fact possess a type of knowledge that cannot actually be questioned. The first book of *La Verité des Sciences* sets forth a type of pragmatic solution to the Pyrrhonian tropes and other skeptical difficulties. Practical means are offered, such as the employment of optical rules. Common-sense observations show how we do in fact settle any philosophical disproof of the claims of the skeptics. The

<sup>83</sup>"Car l'on peut dire que nous voyons seulement l'écorce, & la surface de la nature, sans pouvoir entrer dedans, & que nous n'aurons jamais autre science que celle de ses effets extérieurs, sans en pouvoir penetrer les raisons, & sans sçavoir la maniere dont elle agit, jusques a ce qu'il plaise à Dieu de nous delivrer de cette misere, & nous dessiller les yeux par la lumiere qu'il reserve à ses vrais adorateurs" (p. 11; see pp. 9-11).

<sup>84</sup>"Il n'y a rien de certain dans la Physique, ou qu'il y a si peu de choses certaines, qu'il est difficile d'en proposer" (p. 71; see pp. 69-71).

<sup>85</sup>*Ibid.*, pp. 72-74.

<sup>86</sup>Charles Adam, "Vie de Descartes," *Oeuvres de Descartes*, ed. Adam and Tannery (Paris, 1910), xii, 131.

<sup>87</sup>Mersenne, pp. 321 ff.

remainder of *La Verité des Sciences* is a compendium of the vast body of truths that are actually known in the mathematical disciplines, which no honest skeptic can doubt if he understands them.

But does this constitute a refutation of skepticism? Charles Adam argued that it does not because Mersenne had never questioned the scientific laws that he employed in answering the Pyrrhonists.<sup>36</sup> Lenoble contended that Mersenne actually did refute skepticism by cutting the ground out from under the Pyrrhonian objections. By rejecting the demand for a metaphysical basis for scientific knowledge, Mersenne has demolished the force of skepticism.<sup>37</sup> I submit that Mersenne's science without metaphysics is fundamentally a kind of skepticism, which he recognizes. The philosophy of science presented by Mersenne depends first upon admitting that no grounds can ever be given for our knowledge. We have no way of telling if our information corresponds to reality or if our knowledge is like God's. Once this has been recognized, we can then systematize what we know into laws about appearances and thus develop sciences of phenomena. This new type of science, advocated by both Mersenne and Gassendi, was not what previous philosophers had sought—a science of reality. Instead it was what remained after one had admitted that the skeptics were correct in doubting that any science of reality could ever be discovered. The skeptical arguments lose their force by being accepted and not by being disproved. Once the full strength of the Pyrrhonian onslaught has been granted, the ground has been cut from under dogmatism rather than skepticism. What has been added by Mersenne, however, is a new ending to an old story, a “justification” of a new kind of science based upon a complete doubt of the possible discovery of any ultimate principles.

One finds in Mersenne a paradoxical attitude towards skepticism which reflects the temper of his age—the era of intellectual revolution. On the one hand we see Mersenne violently denouncing Pyrrhonism and the Pyrrhonists, and on the other we see him as a kind of theoretical Pyrrhonist (and an intimate friend of the practicing Pyrrhonists, La Mothe Le Vayer, Naudé, Sorbière and the young Gassendi). This ambivalence illustrates a basic quest of seventeenth-century thought

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for a *via media* between complete skepticism and indefensible dogmatism.<sup>38</sup>

In spite of the many criticisms voiced by opponents, skepticism had swept the field, the skepticism of Montaigne, Charron, the recently rediscovered Sextus Empiricus, and the early Gassendi, joined with the impact of late medieval nominalism and the fideistic Aristotelianism of Pomponazzi and the Paduans.<sup>39</sup> Many thinkers who lived in the mainstream of thought of the period had been overwhelmed by the tide of skepticism and had accepted as a basic fact the view that nothing is completely certain in any field of inquiry. If the force of the prevailing skepticism were once admitted, what would then follow? Presumably the logical outcome of the whole matter would be the application of the skeptical outlook to practice, with devastating

<sup>38</sup>See for instance, Blaise Pascal, *Pensées*, ed. Brunschwig, introd. by Ch.-M. Des Granges (Paris, 1951), #434, pp. 183-86; Jacques Du Bosc, *Le philosophe indifférent* (Paris, 1643), Deuxième partie, pp. 1123-24; and Petrus Gassendi, *Syntagma Philosophicum, Logica*, II, v, in *Opera Omnia* (Lyon, 1658), I, 79.

<sup>39</sup>Cf. Alan M. Boase, *The Fortunes of Montaigne* (London, 1935); Henri Busson, *La Pensée Religieuse Française de Charron à Pascal* (Paris, 1933); René Pintard, *Le Libertinage Érudit dans la première moitié du XVII<sup>e</sup> siècle* (Paris, 1943); Julien-Eymard D'Angers, *Pascal et ses Précurseurs* (Paris, 1954); and R. H. Popkin, "The Sceptical Crisis and the Rise of Modern Philosophy," *Review of Metaphysics*, VII (1953-54), 133-51, 308-22, and 499-510.

<sup>40</sup>This is not to suggest that Descartes was a Thomist but rather that he was seeking the type of foundation that medieval thinkers had sought. The old ways had collapsed. Descartes was offering a new way to satisfy old conditions.

<sup>41</sup>I use this term to designate a group of Pyrrhonists who couple their Pyrrhonian attitude with certain anti-intellectualistic strains of humanism, and who are interested primarily in humanistic rather than scientific questions.

<sup>42</sup>See, for instance his *Discours pour montrer que les Doutes de la Philosophie Sceptique sont de grand usage dans les*

*sciences*, in *Oeuvres de François de La Mothe Le Vayer* (Paris, 1669), xv, 61-124, where he argues that skepticism will make one see the futility and arrogance of scientific research, and then maybe one will give it up. (It should be noted that La Mothe Le Vayer is oblivious of the scientific revolution going on around him and is thinking of science in the sense of Aristotle or Democritus.)

<sup>43</sup>This interpretation of Sorbière will be developed in a projected study of the author. An interesting comment on this attitude of Sorbière's appears in Thomas Sprat's *Observations on Monsieur de Sorbière's Voyage into England* (London, 1665), pp. 275-6, when Sprat criticizes Sorbière for being so positive that English food was bad. "But yet I must tell him, that perhaps this Rigid condemning of the *English Cookery*, did not so well suit with his belov'd Title of *Sceptick*. According to the laws of that profession, he should first have long debated whether there be tast, or no; whether the steam of a pot be only a fancy, or a real thing; whether the Kitchen fire has indeed the good qualities of roasting, and Boiling, or whether it be only an appearance. This had bin a dispute more becoming a *Sceptick*, than thus to conclude Dogmatically on all the Intrigues of *Haut gousts*; and to raise an endless speculative quarrel between those that had bin hitherto peaceful and practical Sects, the *Hashe's* and the *Surloiners*."



and enervating results. But could one be a complete Pyrrhonist in practice as well as theory? There might be no foundation for human knowledge. *Que faire?* To be a dogmatist, a defender of this knowledge, required building an unconstructible foundation for it. Only a determined, unregenerate medieval mind like that of René Descartes<sup>40</sup> was ready to save the dogmatic outlook by offering a towering edifice of human knowledge, built upon an “unshakeable” foundation, to replace the withered and rotted dogmatism of the late Scholastics. Others, lacking, perhaps, the heroic attitude of Descartes, could only see the human tragedy of man lost between an indefensible dogmatism and an unacceptable skepticism, seeking desperately for some new solution, some *terra incognita*, which could receive as peaceful neighbors theoretical Pyrrhonism and the knowledge that men had acquired.

This quest for stability rather than certainty goes on in varying degrees in many seventeenth-century minds, including that of Mersenne. The existence of scientific and mathematical knowledge makes one say *adieu au Pyrrhonisme*, and yet the skeptical arguments show that a necessarily true science of reality cannot be discovered. The thoroughgoing skeptics who wish to make their practice consistent with their theory are willing to say *adieu aux sciences* and throw out all human knowledge. The humanistic Pyrrhonists<sup>41</sup> like François de La Mothe Le Vayer, the intellectual and spiritual heir of Montaigne, let their skepticism lead to a jesting and jeering attitude toward all intellectual endeavours.<sup>42</sup> Perverse skeptics like Samuel Sorbière seem to be trying to live the life of Pyrrho incarnate by pretending to make no judgments about intellectual matters.<sup>43</sup> But Father Mersenne—and in later years, his closest friend, Father Gassendi—could not, nor did they wish to, dispense with the achievements of mankind in the search for religious and scientific knowledge. Hence the quest. They find a solution only in the pragmatic and positivistic interpretation of science.

Some further indications of Mersenne's attitude of “constructive skepticism” can be found in his correspondence. Mersenne's friends seem to be aware that Pyrrhonism is a very touchy subject with him, and yet they are aware that, although the very mention of the term

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may arouse him, it is nevertheless the case that Mersenne is a type of skeptic. The veteran anti-Pyrrhonist, Pierre Le Loyer, chided Mersenne for his skepticism while adding that he knew that Mersenne was not a Pyrrhonist.<sup>44</sup> Gassendi, in his letter to Mersenne in his attack on the Rosicrucian, Robert Fludd, made a similar point. After first confessing to a skepticism which he knew annoyed Mersenne and which he claimed Mersenne forbade him to hold, Gassendi offered a compromise—that they, in their daily lives, accept views only on a probable basis.<sup>45</sup>

An extended discussion of Mersenne's attitude towards skepticism was offered by La Mothe Le Vayer, an account which aids in evaluat-

<sup>44</sup>"Je voy qu'estes sectateur de la seconde Academie et de Carneade, lequel de quelque chose proposée et minse en dispute, estimoit qu'on pouvoit discepter probablement; et j'embrasse l'opinion de Varron, qui tenoit pour la premiere Academie, de laquelle ne difere la seconde sinon de parolles et non d'effaict. Ce n'estoit pas comme la seconde, laquelle estoit d'Arcesilaus et approchoit fort des philosophes Pyrrhoniens, de laquelle je scay qu'estes aultant esloigné que vous estes proche de la philosophie Platonienne . . ." (Pierre Le Loyer à Mersenne, 13 February, 1627, in *Correspondance du P. Marin Mersenne*, publiée par Mme. Paul Tannery, ed. Cornelis de Waard avec la collaboration de René Pintard [Paris 1932], I, 521).

<sup>45</sup>" . . . et non ignoras tenue scepticumque meum ingenium vix posse quidpiam exerere, quod tibi probe satisfaciat. . . . Tametsi enim tu me fere Pyrrhonium esse prohibes sicque semper urgere soles, quasi aliquid habeam quod dogmaticum proferam, vicissim tamen amicitiae jure illud debes concedere, ut vivere in diem liceat et nihil unquam vel efferre vel excipere praeter fines merae probabilitatis" (Pierre Gassendi à Mersenne, 4 February, 1629, in *Correspondance du P. Marin Mersenne* [Paris, 1937], II, 184-85).

<sup>46</sup>In Mersenne, *Questions Harmoniques. Dans lesquelles sont contenues plusieurs choses remarquables pour la Morale, & pour les autres sciences* (Paris, 1634), pp. 84-165.

<sup>47</sup>"Je n'ay point fait difficulté de me jouer avec vous des moyens de l'Epoque, sachant bien que vous ne les avez jamais improuvez dans les limites des sciences humaines, & que vous n'avez jamais blâmé la Sceptique lors que respectueuse vers le Ciel, & captivant sa ratiocination sous l'obeissance de la foy, elle s'est contêtée d'attaquer l'orgueil des Dogmatiques par l'incertitude de leurs disciplines. Une mesme espée peut servir à un meschant pour commettre un infame homicide, & estre l'instrument d'une action heroïque dans la main d'un homme vertueux. Celuy qui met les choses divines à l'examen du Pyrrhonisme est aussi condamnable, qu'un autre peut estre estimé, de se former des notions, qui luy representent la plus grande sagesse mondaine, une espece de folie" (*ibid.*, pp. 161-62).

<sup>48</sup>"Quam libenter illi tuae Epochae et Scepticis naeniis renuntiaturus es, cum Dogmaticam firmissimis innixam fulcris fateri cogeris" (Mersenne à Sorbière, 25 April, 1646, printed in Gaston Sortais, *La Philosophie Moderne depuis Bacon jusqu'à Leibniz* [Paris, 1922] II, 214-15). Mersenne's comments on *De Cive* are only of the highest praise. Gassendi at least noticed the irreligious slant, though highly approving of Hobbes's work. Descartes, on the other hand, vehemently condemned *De Cive* for basing its analysis on "maximes, qui sont tres-mauvaises et tres-dangereuses." Cf. Sortais, *La Philosophie Moderne*, pp. 214-16; and Lenoble, *Mersenne*, pp. 576-78.

ing the peculiar character of Mersenne's views. In the latter's *Questions Harmoniques*, in the section "Is Music a Science, and Does It Have Evident and Certain Principles?" Mersenne printed La Mothe Le Vayer's *Discours Sceptique sur la Musique*.<sup>46</sup> After giving various reasons for being skeptical about the achievements of music and musicians, La Mothe Le Vayer ended on a personal note, in a post-script to Mersenne, claiming an accord between his skepticism and his friend's views. Mersenne, La Mothe insisted, had never blamed the skeptics for attacking the pride of the dogmatists, provided that the skeptics were also obedient to the faith and did not extend their doubts into religion. Skepticism is a weapon that can be used for good or evil purposes. The Pyrrhonist who casts doubt on divine matters is wicked, whereas the one who shows that the greatest worldly wisdom is a kind of foolishness is performing a beneficial service that Mersenne and the skeptic can both applaud.<sup>47</sup> La Mothe Le Vayer might have been overestimating the area of agreement that existed between himself and his friend Mersenne, but at least they would agree to use the skeptical sword to slay the pride of the dogmatist. Mersenne was, however, also worried about the other uses to which it might be put in religion and science. La Mothe Le Vayer was willing to exempt religious knowledge from his attacks, but for the rest he intended to remain in suspense of judgment rather than accept any dogmatic theory. Mersenne took one further step, that of accepting scientific knowledge without dogmatic grounds.

It is interesting that several years later Mersenne wrote to Sorbière concerning Hobbes's *De Cive*, telling him what a masterpiece it was, and that it would overthrow Sorbière's skepticism.<sup>48</sup> If one asks what Hobbes had discovered that could demolish Pyrrhonism, it is not that he had developed a metaphysical foundation for knowledge of man that was indubitable but rather (for Mersenne) that he had developed a science of man. Like the Pyrrhonist of *La Verité des Sciences*, Sorbière was expected to give up his doubts by being shown what can be known. But this would not make him a dogmatist in the sense of one who knows the true nature of things. Hobbes's science of man would still be compatible with the claim that we can never know any ultimate truths about reality.

*Father Mersenne's War against Pyrrhonism*

Richard H. Popkin



These glimpses of Mersenne's attitude indicate, I believe, that what he was fighting was not skepticism *per se* but a kind of reaction that might, and sometimes did, result from seeing that fundamentally every theory was open to question. This reaction might take the form of an antiscientific, humanistic skepticism, as it did with La Mothe Le Vayer and Sorbière, or might even extend further and become a religious skepticism, even atheism. The last step was, of course, anathema to Mersenne. But even the first stage he saw as dangerous, in that it amounted to a rejection of the one means God had given us to get through this vale of tears. The *crise pyrrhonienne* cannot be resolved, but at least by scientific endeavor we are able to live with it. Theoretical skepticism is good, and perhaps even necessary, in eliminating the pride of the dogmatists. Practical skepticism, in either religion or science, is a road to disaster.

Mersenne's "constructive Pyrrhonism" is not the scientistic way of answering skepticism. The latter view holds that the progress of scientific discoveries, theories, and so on, has made the original reasons for doubting ridiculous because we have by now uncovered, or will shortly uncover, the real world. Mersenne, on the other hand, saw that the progress of science in no way disproved Pyrrhonism, unless the Pyrrhonist was foolish enough, or impious enough, to doubt the scientific achievements *as well as* the grounds for them. The latter had to be doubted, and the former had to be accepted. "La vérité des sciences" does not overthrow total theoretical skepticism but is the constructive issue from it.

## PHILOSOPHY IN ATOMIC PHYSICS: COMPLEMENTARITY

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### Introduction

The progressive scientific discovery of reality by means of atomic physics raises new philosophic problems or gives a new significance to the old philosophic views and interpretations of the material world. Both philosophers and physicists are well aware of this fact, as is evidenced by the ever-renewed interest shown by scientists in philosophic discussions and, conversely, by philosophers in scientific progress. At the Fourth International Thomist Congress (Rome, Sept. 13-17, 1955), issues raised by modern science were discussed by philosophers. One of the outstanding features of the Congress was precisely the agreement on the need of co-operation between scientists and philosophers. The Pope himself, in his address expressed the feeling of all the participants:

You know how advantageous and necessary it is for a philosopher to deepen his own understanding of scientific progress . . . It is only by means of mutual understanding and cooperation that there can arise a great edifice of human knowledge that will be in harmony with the higher light of divine wisdom.<sup>1</sup>

Yet the difficulties in the way of this desired understanding are great indeed. Philosophers, particularly, experience the difficulty of having to face a hardly digestable technical knowledge before they are able to fully grasp the import of the physicists' statements on philosophic matters. An attempt, therefore, to gather and analyze the latter's ideas on problems of common interest and thus make physicists' mentality more accessible to philosophers could well contribute to the desired mutual understanding.

One of the problems raised by microphysics is complementarity, which seems to draw general notice from philosophers. In writing of it here, I should like to present and discuss the facts and mathematical theories of microphysics in the light of their interpretation as given by leading physicists; and I should like to call attention to the philosophical aspects involved and point out the implications that require further discussion.

Complementarity, which claims to be the scientific principle able to solve the wave-corpuscle and similar enigmas of microphysics, has a signification not easily grasped. The principle appears to issue immediately from experimental data, so that it has been possible to talk of the evidence of complementarity.<sup>2</sup> But there are also baffling features, because of which even some leading physicists feel dissatisfied with it.<sup>3</sup> To state the problem properly, therefore, it is necessary to start out from the facts and physical theory as well as an analysis

<sup>1</sup>*Catholic Mind*, Lrv (Jan., 1956), 51.

<sup>2</sup>L. Rosenfeld, "L'Evidence de la complémentarité," *Louis de Broglie, Physicien et Penseur* (Paris: Albin Michel, 1953), pp. 43 ff.

<sup>3</sup>L. de Broglie attributes obscurity to Bohr, the author of the principle. (*La Physique quantique restera-t-elle indéterministe?* [Paris: Gauthier-Villars, 1953], p. 14).

A. Einstein avows having been unable "despite much effort" to achieve the sharp formulation of the principle of complementarity, which he is inclined to reject ("Reply to Criticisms," in *Albert Einstein, Philosopher-Scientist* ["The Library of Living Philosophers"; New York: Tudor, 1951], p. 674).

<sup>4</sup>Such a modellistic interpretation was typical of classical physics, that is, all physical theory preceding the new discoveries. The classical physicists' ideal was sharply outlined by H. A. Lorentz at the Solvay Congress (Bruxelles, 1927) where quantum physics eventually triumphed. "L'image que je veux me former des phénomènes doit être absolument nette et définie et il me semble que nous ne pouvons nous former une pareille image que dans le système de l'espace et du

temps. Pour moi, un électron est un corpuscule qui, à un instant donné, se trouve en un point déterminé de l'espace. Et si cet électron rencontre un atome et y pénètre et qu'après plusieurs aventures il quitte cet atome, je me forge une théorie dans laquelle cet électron conserve son individualité, c'est-à-dire que j'imagine une ligne suivant laquelle cet électron a passé à travers cet atome" (as quoted by J.-P. Vigié in *La Physique quantique restera-t-elle indéterministe?* p. 90).

<sup>5</sup>M. Born, *Atomic Physics* (London and Glasgow: Blackie, 1948), pp. 78 f.

<sup>6</sup>G. Herzberg, *Atomic Spectra and Atomic Structure* (New York: Dover, 1944), pp. 13 ff., esp. p. 15.

<sup>7</sup>W. Heisenberg, *Die physikalischen Prinzipien der Quantentheorie* (Leipzig: Hirzel, 1930), pp. 6 ff.

<sup>8</sup>Herzberg, *Atomic Spectra*, pp. 96 ff.

<sup>9</sup>"Es muss hervorgehoben werden, dass diese Aussagen ganz wörtlich zu nehmen sind und keineswegs nur 'symbolischen Charakter' haben. Denn es kann z.B. durch Stern-Gerlach Experimente festgestellt werden, in welchem stationären Zustand das Atom verweilt" (Heisenberg, *Die Prinzipien der Quantentheorie*, p. 61).



of the meaning of this theory, in which complementarity is the highest achievement.

## I. Experimental Evidence and Physical Theory

Explanation of material reality in terms of perfect models as the ideal of physical theory<sup>4</sup> was proved inadequate by a series of experimental discoveries beginning with the start of the present century.

Energy, in opposition to the classical conception, revealed a discrete structure. After Planck's discovery of the quantum of action, the first step in the new direction was Einstein's "heuristic" interpretation of the photoelectric effect. This consists in the fact that if light falls on a metal surface in a high vacuum, part of it is transformed into mechanical energy; negative electricity issues from the metal surface in the form of electrons. Now, all experimental results are intelligible only by admitting the idea that light consists of a hail of discrete bunches of energy (photons), a viewpoint difficult to reconcile with the classical theory that explained light in terms of continuous waves.<sup>5</sup>

Another new fact was the discovery of stationary states. Bohr succeeded in proving the discrete structure (quantization) of energy by means of the stationary states of the atom. Although still classical-minded and with apparent contradictions, his theory broke loose from many classical laws. The atom consists of a heavy nucleus, positively charged, about which electrons, negatively charged, rotate on fixed orbits. Radiant energy is emitted or absorbed as light quanta by a transition of the electron from one stationary state to another.<sup>6</sup> Experiments by Franck-Hertz<sup>7</sup> in 1914 confirmed the existence of stationary states in atoms. Similarly other experiments by Stern-Gerlach in 1921 demonstrated also the space quantization of atoms. The total angular momentum of the atom is space quantized in a magnetic field; that is, the angular momentum vector can take only certain discrete directions in a magnetic field.<sup>8</sup> Quantum or discrete states of energy were therefore proved beyond any doubt.<sup>9</sup> But more startling facts were to be revealed.

Light, besides its well-established wave character, has a corpuscular behavior. The Compton effect proves it by the laws of frequency

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change in the scattering of X-rays.<sup>10</sup> Further experimental tests found that the light corpuscular theory is thoroughly in accord with facts. The photon-electron collision can even be visualized in the Compton-Simon experiment. Radiation definitely behaves like a corpuscle.<sup>11</sup>

Matter, on the other hand, not only has evident corpuscular properties but has also a wave behavior. Surprising evidence was obtained by Davisson and Germer almost casually. Electrons, accelerated against a nickel crystal, showed selective reflection, just as X-rays, whose wave nature was absolutely certain. Countless experiments were instituted to investigate this unsuspected feature of material particles. They were found to have a behavior completely analogous to that of light quanta.<sup>12</sup>

Both light and material particles show a consistent double aspect in experiments. Whenever we are dealing with a single elementary process—for instance, an electron impinging on a screen—we must predominantly use the particle concept to describe experimental findings; but when we are dealing with a huge number of microevents—for instance, an electron stream passed through a thin metal foil—in order to describe the experimental situation we must predominantly use the wave theory.

Now, usual models of classical physics proved completely inadequate to cope with the new situation. Apart from other difficulties, the failure of such schemes is strikingly evidenced by the wave-corpuscle riddle. No classical interpretation of it can be thought of

<sup>10</sup>Born, *Atomic Physics*, pp. 82 ff.

<sup>11</sup>"In the Compton scattering we have therefore a typical example of a process in which radiation behaves like a corpuscle of well-defined energy (and momentum); an explanation by the wave theory of the experimental results which we have described seems absolutely impossible" (Born, *ibid.*, p. 84).

<sup>12</sup>S. Flügge-A. Krebs, *Experimentelle Grundlagen der Wellenmechanik* (Leipzig und Dresden: Steinkopf, 1936), p. 154.

<sup>13</sup>A. Einstein-L. Infeld, *The Evolution of Physics* (Cambridge Univ. Press, 1938), pp. 278 ff.

<sup>14</sup>In Schrödinger's words: "Est ist . . . ziemlich wahrscheinlich, dass die Anpassung des Denkens an die Erfahrung ein infiniter Prozess ist und dass 'vollkommenes Modell' einen Widerspruch im

Beiwort enthält, etwa wie 'grösste ganze Zahl'" ("Die gegenwärtige Situation in der Quantenmechanik," *Die Naturwissenschaften*, xxiii [1935], 808).

<sup>15</sup>Schrödinger demonstrated the physical equivalence of the two theories. (Cf. *Mémoires sur la mécanique ondulatoire* [Paris: Alcan, 1933], pp. 71 ff.).

<sup>16</sup>"Die Unbestimmtheitsrelationen beziehen sich auf den Genauigkeitsgrad unserer gegenwärtigen (gleichzeitigen) Kenntnis der verschiedenen quantentheoretischen Grössen. Da diese Relationen nicht die Genauigkeit z.B; einer Ortsmessung allein oder einer Geschwindigkeitsmessung allein beschränken, so äussert sich ihre Wirkung nur darin, dass jedes Experiment, das eine Messung etwa des Ortes ermöglicht, notwendig die Kenntnis der Geschwindigkeit in gewissem Grade

without incurring inextricable difficulties. To prove this point, let us discuss a simple example, light diffraction (the same considerations can be made about material particles). A beam of homogeneous light passing through a pinhole produces bright and dark *rings* on a screen. Now in order to explain the phenomenon in terms of corpuscles (photons), since there is no rectilinear propagation, one could only imagine that there is some interaction between the rim of the hole and the photons responsible for the appearance of the diffraction rings. But even this feeble hope for an explanation is dashed by experimental evidence. In fact, if there are two pinholes instead of one, homogeneous light passing through them gives bright and dark *stripes* on the screen. In terms of photons we must say that a photon has passed through either one of the two pinholes, for we cannot think of its division and the passage through the two holes simultaneously. But then the effect should be exactly the same as in the first case. "Apparently the hole through which the photon does not pass, even though it may be at a fair distance, changes the rings into stripes!"<sup>13</sup> In a few words: If the photon should behave like a corpuscle of classical physics the phenomenon of diffraction would be incomprehensible.

The conclusion, as a consequence of a thorough analysis of all new facts, has general validity: the classical ideal of a perfect model—either corpuscle or wave—had to be modified.<sup>14</sup>

Physicists were confronted with the quantum riddle. They solved it brilliantly along the two main directions of matrix mechanics and wave mechanics, both theories, although based on different considerations, being identical in content.<sup>15</sup>

Heisenberg and Bohr started out by clarifying the notion of a problem with a physical meaning. What do we mean when we speak of the description of a process in terms of corpuscles or in terms of waves? Are we right in assuming that these entities actually exist in microphysics as we imagine them? The answer to such questions can obviously be obtained only by having recourse to experience. Now this (Heisenberg's uncertainty relations<sup>16</sup>) teaches us that in the case of microentities it is impossible to determine more than one at a time of the typical properties of either corpuscle or wave. Consequently it

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is impossible to conclude that microentities are actually corpuscles or waves in the usual sense of the term, and we are not entitled to attribute to them imaginable properties of the macroworld. Thus a new methodological principle was formulated by the two physicists: "If a logically consistent system of atomic mechanics is to be set up, no entities may be introduced into the theory except such as are physically observable." Based on such requirement, Heisenberg was able to lay down the principles of matrix mechanics, later developed by himself, Jordan, and Born. The theory was completely successful in all its applications; particularly it accounted for those spectroscopical data in connection with which Bohr's atomic model had failed.

Wave mechanics, on the other hand, started from a "strange" physical intuition. L. de Broglie,<sup>17</sup> before direct experimental data were available to confirm his idea, thought of the possibility of connecting the propagation of a wave to the movement of a corpuscle. By cleverly taking advantage of Einstein's special relativity and Planck's quantum law he succeeded in giving the mathematical relation between the velocity of the corpuscle and the length of the associated wave.<sup>18</sup> Schrödinger, then, stimulated by De Broglie's work, developed the theory in its fullness. The author's great merit consisted in deducing all logical conclusions from the long-known fact,

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stört. Nehman wir z.B; an, dass die Geschwindigkeit des Elektrons genau bekannt sei, der Ort dagegen völlig unbekannt. Dann muss jede folgende Beobachtung des Ortes das Impulsmoment des Elektrons ändern; und zwar muss diese Aenderung um einen derartigen Betrag unbestimmt sein, dass nach Durchführung des Experiments unsere Kenntnis der Elektronenbewegung durch die Ungenauigkeitsrelationen beschränkt ist" (Heisenberg, *Die Prinzipien der Quantentheorie*, p. 15).

<sup>17</sup>Cf. *Introduction à l'étude de la mécanique ondulatoire* (Paris: Hermann, 1930), pp. 35 ff.

<sup>18</sup>In this connection it is worth noticing the factual foundation of all the procedure. "I think that not a single step [in wave mechanics] would have been possible if some necessary foothold in facts had been missing. To deny this would mean to maintain that Planck's discovery of the quantum and Einstein's theory of relativity were products of pure thinking. They were

interpretations of facts of observation, solutions of riddles given by Nature—difficult riddles indeed, which only great thinkers could solve" (Born, *Natural Philosophy of Cause and Chance* [Oxford: Clarendon Press, 1949], p. 90).

<sup>19</sup>"The way out of the difficulty was actually (though unexpectedly) found in the possibility . . . that in the Hamiltonian Principle we might also assume the manifestation of a 'wave-mechanism', just as we have been long accustomed to acknowledge it in the phenomena of light and in the governing principle enunciated by Fermat" (*Science and the Human Temperament*, p. 176).

<sup>20</sup>"Si les conceptions que j'ai énoncées en 1927 devaient un jour ressusciter de leurs cendres, ce ne pourrait être . . . sous la forme tronquée et inacceptable de l'onde-pilote" (*La Physique quantique restera-t-elle indéterministe?* p. 12).

<sup>21</sup>*Atomic Physics*, pp. 90 f.



first discovered by Hamilton, of the striking similarity between classical mechanics and geometrical optics. Fermat's principle states that a light ray travels between two points along such a path that the time taken is the least. The mechanical principle of least action says that of all paths possible between two points, consistent with conservation of energy, the system moves along that particular path for which the time of transit is the least. Now Fermat's principle can be understood only by means of the wave theory of light. What about the least-action principle? Schrödinger solved the riddle by admitting, also for material particles, a wave mechanism.<sup>19</sup> Thus wave mechanics, a fine theory whose positive features were evident, was born. Many difficult aspects of atomic physics such as quantization of energy and uncertainty relations could now be accounted for in a simple, almost intuitive way (at least in the case of free particles), taking advantage of the well-known wave theory of classical physics.

Yet the mathematical solution of the quantum riddle had brought forward new difficulties. What was the physical interpretation, if any, of the wave function, obeying Schrödinger's equation? Schrödinger himself tried to interpret particles as wave packets—namely, as ensembles of plane, monochromatic waves with frequency and direction of propagation nearly equal. But this interpretation proved inadequate, for wave packets are not permanent in time and dissipate when diffracted. Another intuitive interpretation, the “pilot-wave,” was suggested by L. de Broglie, but this idea also met with such difficulties that the author himself dropped it for good.<sup>20</sup>

The universally accepted interpretation of the wave function goes back to Born.<sup>21</sup> According to him, a mechanical process is accompanied by a wave process in which the intensity of the wave (square of the wave amplitude) gives the probability of finding microentities at any given point. The physical justification for such a theory is obtained by comparing the behavior of light and that of an ensemble of particles. Light incident on small particles of dust, for instance, is scattered by them. Now, if instead of thinking light as continuous waves, we interpret it in terms of photons it is evident that the number of scattered photons must be proportional to the intensity of the light wave at the place concerned. Just the same in case of material par-

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ticles. An incident beam of electrons, for instance, is thought of as having a De Broglie wave associated with it. When it passes over an atom this wave produces another spherical wave; analogy with optics leads one to admit that a quadratic expression formed from the wave amplitude should be interpreted as the number of scattered particles. Now the probability interpretation is physically highly significant. By carrying out the calculations it was found that the new idea led to the same result as classical Newtonian mechanics in the case of the scattering of alpha-rays by nuclei and completely agreed with Rutherford's experimental results. Many other scattering processes were later on subjected to the same calculations by Born, Bethe, and Mott, and results were always found in good agreement with experiments.<sup>22</sup> On the conceptual level the importance of the probability interpretation is expressed by the author himself in the following words:

It consists in the recognition that the wave picture and the corpuscle picture are not mutually exclusive, but are two complementary ways of considering the same process—a process whose accessibility to intuitive apprehension is never complete, but always subject to certain limitations given by the principle of uncertainty.<sup>23</sup>

In the new interpretation, both aspects, wave and corpuscle, are equally real. "For both are but two different projections of one and the same reality, both are inseparable from each other, and both together only give the complete description of the object considered."<sup>24</sup>

<sup>22</sup>Born, *ibid.*, p. 90. Born, "The Interpretation of Quantum Mechanics," *British Journal for the Philosophy of Science*, iv (1953), pp. 104 f.

<sup>23</sup>Born, *Atomic Physics*, p. 144.

<sup>24</sup>W. Heitler, "Departure from Classical Thought in Modern Physics," *Albert Einstein*, p. 194.

<sup>25</sup>"... von so ausgezeichnete Güte wie sie selten in der Physik wiederkehren" (Flügge-Krebs, *Experimentelle Grundlagen*, p. 20). J.-J. Trillat, *Les preuves expérimentales de la mécanique ondulatoire* (Paris: Hermann, 1934).

<sup>26</sup>Bohr, *La Théorie atomique et la description des phénomènes* (Paris: Gauthier-Villars, 1932), pp. 105 f.

<sup>27</sup>"... l'insuffisance des méthodes existantes vis-à-vis du problème des particules élémentaires apparaît dans leur

inaptitude à fournir une justification univoque du 'principe d'exclusion' établi par Pauli . . . En effet, ce principe, dont les conséquences sont si importantes pour le problème de la constitution des atomes ainsi que pour le récent développement des théories statistiques, ne se présente que comme une possibilité parmi plusieurs autres imaginables . . ." (*ibid.*, pp. 83 f.)

<sup>28</sup>"The two great theories, relativity and quantum mechanics, both creations of the twentieth century, and both departing profoundly from the classical picture, stand as yet apart from each other. A great deal of work has been done to bring about their unification—and no doubt a certain amount of insight has been gained—but the final solution is still in abeyance. We are concerned with the behavior of

Confirmations of the physical theory of quantum mechanics were plentiful both on the experimental and conceptual level. Experimental tests were extremely satisfactory, "of such exceptional excellence as rarely happens in physics."<sup>26</sup> The technique of electronic diffraction is today so perfectly developed that it is used in industry as a substitute for earlier research methods with X-rays. One can even construct electronic lenses and microscopes, whose resolving power is much higher than that of optical instruments. On the conceptual level confirmations of quantum theory were no less gratifying. To them we can ascribe, first of all, the demonstration of compatibility between wave mechanics and classical mechanics. This simple but necessary result can be easily reached by taking into consideration the Hamilton-Jacobi equation of classical mechanics on one hand and the wave mechanics equation on the other. One comes to the conclusion that the relationship between the two theories is the same as that which holds between geometrical and wave optics. The latter, far from contradicting the former, is a richer theory, containing the former as limiting case. No wonder, therefore, that its explaining ability is far greater. Let it suffice to allude to the tunnel effect. According to classical mechanics the field of force surrounding the atomic nucleus should prevent alpha-particles from abandoning the nucleus. But experience shows that there are radioactive disintegrations. Quantum mechanics solved the enigma. The wave function representing the probability of presence of the particles is initially in the form of a wave packet entirely within the nucleus. The field of forces, although an obstacle for most material waves, let some of them "leak" through. The intensity of the wave leaking through the barrier gives the probability of disintegration of the atomic nucleus.<sup>28</sup>

Inadequacies, however, are to be recognized also in the quantum theory, at least insofar as its present form is concerned. To mention only a couple of cases, Pauli's principle, basic for understanding the periodic system of elements, remains unexplained;<sup>27</sup> and quantum mechanics is as yet a nonrelativistic theory—that is, it applies only to particles which move slowly and for which all gravitational effects can be neglected.<sup>28</sup> Inadequacies of this kind make more plausible the

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long, lively, thoroughgoing discussions of physicists on the interpretation of the physical theory.

## II. Physicists' Discussions on the Interpretation of the Theory

As long as a physical theory is concerned directly with facts—no

fast moving atomistic particles, with the structure of the fundamental particles themselves, electrons, protons, the newly discovered mesons, etc., their creation and annihilation: with an understanding of the elementary unit of the electric charge . . . We are as yet far away from a solution of these problems" (Heitler, "Departure from Classical Thought," p. 198).

<sup>29</sup>"The whole discrepancy is not so much an internal matter of physics, as one of its relation to philosophy and human knowledge in general. Any one of us theoretical physicists . . . confronted with an actual problem would use the same, or at least equivalent mathematical methods, and if we should obtain concrete results our prediction and our prescription for the experimental verification would be practically the same. The difference of opinion appears only if a philosopher comes along and asks us: Now what do you really mean by your words, how can you speak about electrons to be sometimes particles, sometimes waves, and so on? Such questions about the real meanings of our words are just as important as the mathematical formalism" (Born, "The Interpretation of Quantum Mechanics," p. 95). These words of Born, although directly concerning only his discussion with Schrödinger, well define the general problem we are to examine in this article.

<sup>30</sup>"The question at issue has been whether the renunciation of a causal mode of description of atomic processes involved in endeavours to cope with the situation should be regarded as a temporary departure from ideals to be ultimately revived or whether we are faced with an irrevocable step towards obtaining the proper harmony between analysis and synthesis of physical phenomena" (Bohr, "Discussion with Einstein on Epistemological Problems in Atomic Physics," *Albert Einstein*, p. 202).

<sup>31</sup>"Physics is an attempt conceptually to

grasp reality as it is thought independently of its being observed. In this sense one speaks of 'physical reality'" ("Autobiographical Notes," in *Albert Einstein*, p. 81). In a similar vein elsewhere: ". . . die Begriffe der Physik beziehen sich auf eine reale Aussenwelt, d.h. es sind Ideen von Dingen gesetzt, die eine von den wahrnehmenden Subjekten unabhängige 'reale Existenz' beanspruchen (Körper, Felder, etc.);" ("Quanten-Mechanik und Wirklichkeit," *Dialectica*, II (1948), 321).

<sup>32</sup>"Above all . . . the reader should be convinced that I fully recognize the very important progresses which the statistical quantum theory has brought to theoretical physics . . . This theory is until now the only one which unites the corpuscular and undulatory dual character of matter in a logically satisfactory fashion; and the 'testable' relations, which are contained in it, are, within the natural limits fixed by the indeterminacy-relation, complete" ("Reply to Criticisms," p. 666).

<sup>33</sup>*Ibid.*

<sup>34</sup>"What does not satisfy me in that theory, from the standpoint of principle, is its attitude towards that which appears to me to be the programmatic aim of all physics: the complete description of any (individual) real situation (as it supposedly exists irrespective of any act of observation or substantiation)" (*ibid.*, pp. 666 ff.).

<sup>35</sup>"Das Eigentümliche in der gegenwärtigen Situation sehe ich darin: Über den mathematischen Formalismus der Theorie bestehen keine Zweifel, wohl aber über die physikalische Interpretation ihrer Aussagen. In welcher Beziehung steht die  $\psi$ -Funktion zum konkreten einmaligen Sachverhalt, d.h. zu der individuellen Situation eines Einzelsystems? Oder: Was sagt die  $\psi$ -Funktion über den (individuellen) 'Real-Zustand' aus?" ("Elementare Überlegungen zur Interpretation der



matter how unfamiliar they might appear—and tries to give them a rational mathematical expression, physicists, to a man, work at the common task, sharing interests with enthusiasm and dedication. But when philosophic implications start being considered, dissensions crop up.<sup>29</sup>

Most famous among physicists' discussions on the interpretation of quantum mechanics is the Einstein-Bohr discussion.<sup>30</sup>

Einstein's thesis is that the description of physical reality given by the wave function (or  $\psi$ -function) is not complete. To state his viewpoint most clearly, Einstein usually first declares his strong conviction about physics' necessary realism<sup>31</sup> and takes pains to delimit the question as much as possible. He is in favor of wave mechanics as a physical theory,<sup>32</sup> admits the precise validity of the indeterminacy relations ("the correctness of which is, from my own point of view, rightfully regarded as finally demonstrated"),<sup>33</sup> but firmly rejects the interpretation commonly adopted by quantum physicists; namely, the conviction that the riddle of the double nature of all microentities (wave-corpuscle or quantum riddle) has in essence found its final solution in the statistical character of quantum theory.<sup>34</sup> Briefly, to him the question at issue is one of interpretation.

The essential character of the present situation, it seems to me, is this: there are no doubts about the mathematical formation of the theory; there are some about the physical interpretation of its expressions. What is the relation between the  $\psi$ -function and the concrete individual reality, that is, the individual situation of a unique system? Or, in other words, what does the  $\psi$ -function tell us about the (individual) "real fact"?<sup>35</sup>

Besides the first skirmishes at the Solvay Congress of 1927, when Einstein insisted that a single microentity is localized though not localizable,<sup>36</sup> the author proposes two main arguments to prove his

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Grundlagen der Quantenmechanik," *Scientific Papers Presented to Max Born* [London: Oliver & Boyd, 1953], p. 33).

<sup>30</sup>Bohr, "Discussion with Einstein," pp. 201 ff. L. de Broglie, *Mécanique ondulatoire*, pp. 160 f.

thesis. First, the assumption that the description given by the wave function is complete leads to the hypothesis of action at a distance; secondly, quantum mechanics supplies no sufficient evidence of connection with classical physics at the macroscopic level.

For the first argument we have the celebrated paper by Einstein, Podolsky, and Rosen (containing an interesting definition of physical reality)<sup>37</sup> and two other articles.<sup>38</sup> In all of these writings Einstein wants to make the point that action at a distance is the necessary corollary of the hypothesis that the wave function description is complete. To this end he considers a physical system made up of two subsystems which interact only until the initial moment of the observation; from then on they are spatially separated. In this case, he points out, it is natural that one should speak of the real factual situation of subsystem one, absolutely independent of what happens in subsystem two. Yet, according to quantum mechanics, the scientist can get precise information on the state of subsystem one if he makes a measurement on subsystem two; and this information depends on what kind of measurement he undertakes on subsystem two. If he makes another kind of measurement on one subsystem, he gets very different information on the other partial system. This, Einstein maintains, can be admitted only if one accepts action at a distance, for only such a hypothesis can explain why, in consequence of the new disturbance caused by measurement on one subsystem, we find a new value for the corresponding magnitude on the other subsystem.<sup>39</sup>

As for the needed connection with classical mechanics, Einstein says that the probability interpretation is unsatisfactory because it does not give objective description of individual systems, not even

<sup>37</sup>"If, without in any way disturbing a system, we can predict with certainty (i.e., with probability equal to unity) the value of a physical quantity, then there exists an element of physical reality corresponding to this physical quantity" ("Can Quantum-Mechanical Description of Physical Reality Be Considered Complete?" *Physical Review*, XLVII [1935], p. 777).

<sup>38</sup>"Quanten-Mechanik und Wirklichkeit," "Autobiographical Notes".

<sup>39</sup>"Fasst man die  $\psi$ -Funktion in der Quantenmechanik als eine (im Prinzip) vollständige Beschreibung eines realen Sachverhaltes auf, so ist die Hypothese

einer schwer annehmbaren Fernwirkung impliziert" ("Quanten-Mechanik und Wirklichkeit," p. 324).

<sup>40</sup>"Überlegungen zur Interpretation der Quantenmechanik," *Scientific Papers Presented to Max Born*, pp. 36 ff.

<sup>41</sup>"Reply to Criticisms," p. 671.

<sup>42</sup>Bohr, "Discussion with Einstein" pp. 214 ff.

<sup>43</sup>"Can Quantum-mechanical Description of Physical Reality Be Considered Complete?" *Physical Review*, XLVIII (1935), pp. 696 ff. "On the Notions of Causality and Complementarity," *Science*, CXXI (1950), pp. 51 ff.

at the macroscopic level. To prove his point he considers a particle moving freely between impenetrable but perfectly reflecting and smooth walls,<sup>40</sup> and shows that by describing this physical fact in terms of wave functions it is incorrect to imagine that the particle is really moving back and forth between the walls, with a precise localization and a precise momentum at any given time. Consequently, one is induced to view the quantum description only as a statistical description of ensembles of systems.

Einstein's general conclusion of his criticisms against the commonly accepted interpretation of the wave theory is the following:

Within the frame-work of statistical quantum theory there is no such thing as a complete description of the individual system. More cautiously it might be put as follows: The attempt to conceive the quantum theoretical description as the complete description of the individual systems leads to unnatural theoretical interpretations, which become immediately unnecessary if one accepts the interpretation that the description refers to ensembles of systems and not to individual systems. In that case the whole 'egg-walking' performed in order to avoid the 'physically real' becomes superfluous.<sup>41</sup>

Against Einstein's untiring criticisms, Bohr repeatedly stresses the "orthodox" interpretation of quantum theory; namely, the theory that holds that the wave function, with its attendant probability interpretation, gives the only physically significant complete description of microphenomena.

At the Solvay Congress of 1927 he emphasized that—as far as microphysics is concerned—it is wrong to say that a particle is localized though not localizable. To this end, Bohr with great skill proved all experimental arrangements suggested by Einstein inadequate to demonstrate such localization. Even more, he showed that one cannot think of the possibility of localizing quantum particles without destroying essential features of the phenomenon under consideration.<sup>42</sup>

In two other articles Bohr tries to show that both from the experimental and theoretical viewpoints Einstein's contention about the incompleteness of the description given by the wave function is unfounded.<sup>43</sup> He makes the point that the argumentation of Einstein,

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Podolsky, and Rosen not only does not affect the soundness of quantum mechanical description, but the wording of the above-mentioned criterion of physical reality suggested by the three authors contains an ambiguity as regards the meaning of the expression "without in any way disturbing a system." Actually it is true that by making a measurement on one of the two subsystems, the experimenter, at least in principle, can get information on the initial state of the other; but there is nothing unreasonable in this result, if we take into account the fact that the two subsystems, because of their former interaction, somehow may be considered as one system. However, there is no question of action at a distance. For of the two possible measurements the experimenter has the choice of making upon either of the subsystems only one can be actually carried out, since they are mutually exclusive. Therefore the proposed criterion of physical reality is ambiguous.<sup>44</sup>

As a general conclusion to the discussion it is worth comparing the opposite viewpoints of the two scientists. Einstein thus sums up his attitude against the commonly accepted interpretation of quantum mechanics about the completeness of the description given by the wave function:

"Of course there is . . . no question of a mechanical disturbance of the system under investigation during the last critical stage of the measuring procedure. But even at this stage there is essentially the question of *an influence on the very conditions which define the possible types of predictions regarding the future behaviour of the system*. Since these conditions constitute an inherent element of the description of any phenomenon to which the term 'physical reality' can be properly attached, we see that the argumentation of the mentioned authors does not justify their conclusion that quantum-mechanical description is essentially incomplete" ("Discussion with Einstein," p. 234). Pauli also agrees with Bohr in condemning Einstein's thesis ("Editorial," *Dialectica*, II [1948], p. 308 f.),

<sup>45</sup>"Reply to Criticisms," p. 672.

<sup>46</sup>"Discussion with Einstein," p. 235.

<sup>47</sup>"A Discussion of Certain Remarks by Einstein on Born's Probability Interpreta-

tion of the Quantum Theory," *Scientific Papers Presented to Max Born*, pp. 13 ff.

<sup>48</sup>"In conclusion the author would like to state that he would admit only two valid reasons for discarding a theory that explains a wide range of phenomena. One is that the theory is not internally consistent, and the second is that it disagrees with experiment. Principles and requirements such as those suggested by Einstein frequently serve as valuable heuristic aids, when they are used in the search for a *positive* theory. But when they are used to *discard* a logically consistent theory that agrees with all known experimental facts, then they may lead to another form of precisely that subjectivism which Einstein finds unsatisfactory in Born's interpretation of the quantum theory" (*ibid.*, p. 18).

<sup>49</sup>"Are there Quantum Jumps?" *British Journal for the Philosophy of Science*, III (1952), 109 ff.; 235 ff.



Your point of view—taken as theoretical possibility—is incontestable. For me, however, the expectation that the adequate formulation of the universal laws involves the use of *all* conceptual elements which are necessary for a complete description, is more natural.<sup>45</sup>

Bohr, however, attacks also this last defense line:

Even if such an attitude might seem well-balanced in itself, it nevertheless implies a rejection of the argumentation exposed in the preceding, aiming to show that, in quantum mechanics, we are not dealing with an arbitrary renunciation of a more detailed analysis of atomic phenomena, but with a recognition that such an analysis is *in principle* excluded.<sup>46</sup>

As for the second inadequacy for which Einstein blames quantum theory—namely, that it contradicts the “well-founded requirement that in the case of a macro-system, the motion of the system should approach the motion following from classical mechanics”—the author finds an unexpected opponent in D. Bohm, a physicist who, like himself, believes in a deterministic interpretation of nature. Bohm<sup>47</sup> maintains that Einstein’s requirement is not based on experimental evidence at all. To prove his assertion, he discusses two cases, ideally possible also in macroscopic physics, dealing with light and mechanics. Then he concludes by completely rejecting Einstein’s demand as leading to the same subjectivism for which Einstein blames the “orthodox” theory.<sup>48</sup>

There are other discussions at present among leading physicists, centered on the interpretation of quantum mechanics.

Schrödinger<sup>49</sup> came up recently with a theory of his own about the interpretation of waves in quantum physics. In summary his ideas are the following. The only reality of the physical world are waves. There are no particles and there are no energy quanta; both are an illusion due to a wrong interpretation of resonance phenomena of interfering waves. Moreover, any attempt to describe the physical phenomena in terms of particles without contradicting the well-established wave character of their propagation in space leads to impossible, unaccept-

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able conceptions. All difficulties, on the contrary, disappear if one abandons the particle concept and uses only the idea of wave.

As a decisive answer to such criticisms, Born,<sup>50</sup> avoiding all mathematical questions, simply pointed out the evident demand of common sense. If the theoretical physicist wants to connect his results with experimental facts, he must after all describe them in terms of bodies, not of waves. For the world consists of tangible bodies, not of waves. And the laws governing the motion of ordinary bodies are undoubtedly those of Newtonian mechanics, which are concerned only with particles, not waves. To this end it is obviously necessary that the corpuscle concept, as part of matter in bulk, be preserved.

Another problem concerns the possibility of a deterministic interpretation of the behavior of single microsystems. D. Bohm suggested recently a new "interpretation of the quantum theory in terms of

<sup>50</sup>"The Interpretation of Quantum Mechanics," *British Journal for the Philosophy of Science*, iv (1953), 95 ff.

<sup>51</sup>"A Suggested Interpretation of the Quantum Theory in Terms of Hidden Variables," *Physical Review*, LXXXV (1952), 166 ff.; "Proof that Probability Density Approaches  $|\psi|^2$  in Causal Interpretation of the Quantum Theory," *Physical Review*, LXXXIX (1953), 458 ff.

<sup>52</sup>Although any final evaluation of Bohm's theory is premature it may be useful to notice its similarity with De Broglie's theory of the pilot-wave. In this connection J.-P. Vigié pertinently writes about the "causal theory": "Sous cette forme la théorie présentée au Congrès Solvays par M. L. de Broglie ne survécût pas aux objections soulevées par M. Pauli, objections dont certaines du reste ont été surmontées ensuite par M. D. Bohm. Elle présente toutefois des difficultés dont on n'entrevoit pas la solution: difficultés classiques d'abord relatives au lien entre champ et particules, difficultés propres ensuite relatives à la nature du champ quantique" ("Physique relativiste et physique quantique," *La Physique quantique restera-t-elle indéterministe?* p. 101).

<sup>53</sup>The theory of the double solution is presented by the author in *La Physique quantique restera-t-elle indéterministe?* and "Une interprétation nouvelle de la méca-

nique ondulatoire est-elle possible?" *Il N. Cimento, Series x*, 1 (1955), 37 ff.

As for the present state of the problem the author writes: "... toute démonstration précise est actuellement impossible. Ce qui malheureusement rend présentement impossible une étude précise des conséquences de la non-linéarité de la propagation des onde  $u$ , c'est que nous ne connaissons pas la forme des termes non linéaires à introduire dans les équations de propagation; nous savons seulement que ces équations doivent se réduire presque partout dans l'espace aux équations linéaires complètes de la mécanique ondulatoire usuelle. Les équations non-linéaires complètes ne pourraient, semble-t-il, être fournies que par une nouvelle théorie de la 'Relativité' 'supergénéralisée' qui ferait rentrer toutes les catégories de champs  $u$  dans la structure même de l'espace-temps" (*Il N. Cimento, Series x*, 1, 48).

<sup>54</sup>"Nach meiner Meinung ist es im Prinzip nicht befriedigend, eine derartige theoretische Einstellung der Physik zugrunde zu legen . . ." ("Überlegungen zur Interpretation der Quantenmechanik," p. 40).

<sup>55</sup>"Die einzige bisherige annehmbare Interpretation der Schrödinger-Gleichung ist die von Born gegebene statistische Interpretation" (*ibid.*).

hidden variables.”<sup>51</sup> The author says that he was prodded to think out this theory by the need of finding a way out of the difficulties that the quantum theory, as it is usually interpreted, is not able to meet at the nuclear level. According to him, there is no wave-corpuscle enigma any longer, just as there is none in Maxwell’s electrodynamics. In his theory, too, the wave function of an individual particle is a representation of an objectively real field. In contrast to the usual interpretation, the new interpretation permits him to conceive of each individual system as being in a precisely definite state, whose changes with time are determined by definite laws analogous to the classical equations of motion. Quantum mechanical probabilities are considered only as a practical necessity, not as a manifestation of an inherent lack of complete determination in the properties of matter at the quantum level. Yet there are serious difficulties against the acceptance of Bohm’s theory.<sup>52</sup>

In the same line as Bohm’s “causal interpretation” is De Broglie’s theory of the double solution (where, besides the usually considered wave function—that is, the  $\psi$ -function—there is another wave function, called the  $u$ -function). The author proposed this as a revised version of his theory of the pilot-wave. However, although De Broglie expects much of his new idea and claims some good results, the situation, by his own admission, is far from satisfactory.<sup>53</sup>

To sum up, what is the conclusion issuing from the above-mentioned physicists’ discussions?

The wisest answer seems to be that of Einstein. After having examined all the existing alternatives—the theories of Bohm and De Broglie and the theory of Schrödinger—to his own dissatisfaction,<sup>54</sup> he declares:

The only acceptable interpretation of the Schrödinger equation given up to this time is the statistical interpretation offered by Born.<sup>55</sup>

Consequently there is no question of an overrating of the orthodox interpretation if from now on we mainly consider this theory. In particular we are going to examine its most characteristic expression, the principle of complementarity.

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### III. The Principle of Complementarity

Complementarity aims at being the theoretical principle—both logically coherent and perfectly consistent with experimental evidence—expressing the typical features of the physical investigation of micro-reality.

Such typical features are represented by the following two successive steps. First, in order to describe any experimental arrangement and the results of observations, the physicist must have recourse to the terminology of classical physics; that is to say, he is compelled to use the words of common language appealing to imagination, to talk, for example, in terms of corpuscles and waves. But common language has grown out of everyday experience and cannot surpass its limitations. Therefore he must use an obviously inadequate language when dealing with atomic physics, where macroscopic physics breaks down. Secondly, the physicist cannot—as a matter of principle—obtain his information, to be expressed with inadequate concepts, directly from microentities; but he must always use instruments which necessarily disturb in an uncontrollable way the state of the object investigated. In fact, to get any information at all of a microsystem, he must use a measuring instrument, at least a photon; but this disturbs the examined system through the inherently connected Compton effect. Therefore if one considers that quantum mechanics has to take into consideration the interaction between object and apparatus, one sees that there can exist no single experimental arrangement giving complete information about the state of microentities. Consequently in order to get full experimental information we must use mutually exclusive—complementary—experimental arrangements to obtain, in

<sup>56</sup>"Discussion with Einstein," pp. 209 f. In a more detailed way the same author in another article says: "... an inherent element of ambiguity is involved in assigning conventional physical attributes to atomic objects. A clear example of such an ambiguity is offered by the dilemma ... as to the properties of electrons or photons, where we are faced with the contrast revealed by the comparison between observations regarding an atomic object, obtained by means of different experimental arrangements. Such empirical

evidence exhibits a novel type of relationship, which has no analogue in classical physics and which may conveniently be termed *complementarity* in order to stress that in the contrasting phenomena we have to do with equally essential aspects of all well-defined knowledge about the objects" ("On the Notions of Causality and Complementarity," p. 52).

<sup>57</sup>"On the Notions of Causality and Complementarity," p. 54.

<sup>58</sup>"Discussion with Einstein," p. 222.



turn, complementary information on the atomic object under consideration.

The principle of complementarity only theorizes this state of affairs forced on physicists by reality itself. In the words of Bohr, the author of the principle:

. . . evidence obtained under different experimental conditions cannot be comprehended within a single picture, but must be regarded as *complementary* in the sense that only the totality of the phenomena exhausts the possible information about the objects.<sup>66</sup>

Complementarity, then, issues directly from experiments. But its signification seems to reach far beyond all experimental evidence, for it claims to be the physical explanation of the quantum riddle and all similar enigmas.

The complementary mode of description does indeed not involve any arbitrary renunciation of customary demands of explanation but, on the contrary, aims at an appropriate dialectic expression for the actual conditions of analysis and synthesis in atomic physics.<sup>67</sup>

According to the principle there is simply no riddle at all; difficulties just vanish in the face of logico-experimental considerations. Microphenomena are not visualizable, that is all. We are wrong in overemphasizing classical and imaginable concepts in a field where they are obviously inadequate; we must but keep to experiment as well as to mathematical formalism.

Actually, microphysics presents some striking instances that demonstrate how we must give up visualizing atomic phenomena. Bohr introduces an example to which Einstein also had called attention.<sup>68</sup> Let us take a photon. If a semireflecting mirror is placed in its way there are two possibilities for its direction of propagation. If we place two photographic plates, one in each of the two directions of propagation, the photon may be recorded on only one of the two plates. But let us suppose that we replace the plates by mirrors; we may observe effects exhibiting an interference between the two reflected wave trains.

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In any attempt of a pictorial representation of the behaviour of the photon we would, thus, meet with the difficulty: to be obliged to say, on the one hand, that the photon always chooses *one* of the two ways, and, on the other hand, that it behaves as if it had passed *both* ways.<sup>59</sup>

Another example of the inadequacy and contradictions due to an exaggerated application of classical imaginable concepts to quantum physics is given by Heisenberg's grating.<sup>60</sup> Let us have an alpha-particle being reflected at a diffraction grating. It seems to be an unobjectionable statement that the radium atom, by which the particle is emitted, does possess hitherto unknown properties which accurately define the direction of propagation of the particle. Yet this obvious statement confronts us with a seemingly insoluble paradox. We know with certainty that the mechanical forces of interaction between the grating and the particle vanish very rapidly as distance increases, so that the reflection is influenced only by the grating lines near the incident particle. But, on the other hand, we know for sure from wave theory that the *entire* grating—therefore also distant lines—exert influence on the particle insofar as reflection is concerned. Heisenberg cuts the Gordian knot by having recourse to complementarity considerations. When there is no experience enabling us to localize the particle before the reflection, it is meaningless to talk of its position; so it is understandable that the entire grating influences the reflection. When, on the contrary, we make a measurement to know the position of the particle, we can measure it and foresee consequently on what line the particle is going to fall; but this measurement disturbs uncontrollably the momentum and the associated wave of the particle, so that the diffraction pattern, due to reflection, is destroyed. In all such cases complementarity claims to be the only rationally acceptable physical interpretation.

Quantum scientists are sure that complementarity is able to clarify many strange features of reality, both in physics and in other fields.

<sup>59</sup>*Ibid.*

<sup>60</sup>*Die physikalischen Prinzipien der Quantentheorie*, pp. 58 f. See also *Philosophic Problems of Nuclear Science* (London: Faber & Faber, 1952), pp. 48 ff.

autant de 'réalité' ou si l'on veut, tout aussi peu de 'réalité' que les particules élémentaires elles mêmes" (Bohr, *La Théorie atomique*, pp. 10 f.).

<sup>61</sup>*Ibid.*, p. 75.

<sup>61</sup>"Dans son domaine d'application, le concept d'état stationnaire possède tout

<sup>61</sup>L. de Broglie, "Sur la complémentarité des idées d'individu et de système," *Dialectica*, II (1948), 325 ff.

In physics complementarity in regard to wave-corpuscle properties of microentities has already been considered in the preceding. Photons are both particles and waves, for we can either experience their corpuscular properties, by means of the Compton effect, or their wave-like behavior, by having them interfere in a Young interference setup. Just the same thing is true of material particles. In numberless experiments we can even count them, yet there are other facts—for example, selective reflection by metal crystals—that force us to admit also for matter some typical wave properties. In addition, there are several quantum facts, otherwise unaccountable for, that complementarity tries to throw light upon. As a typical example let us consider the relations between chemical and mechanical properties of the atom. In chemistry we consider the atom as such, as a unitary structure; but this implies that we must renounce any mechanical description of the inner details of the atom. In fact, if we want to investigate with mechanics the details of the atomic structure, we must use a measuring instrument, at best a single photon, to find out where electrons are inside the atom. But this adds such a great deal of energy to the atom that the electron under consideration at once leaves the atomic union. Consequently when we demonstrate the spatial relations of the parts of the atom, we destroy at the same time the atomic unitary structure. Complementarity takes into due consideration both the atomic and the spatial-intuitive concepts, and simply says that mechanical and chemical methods of describing minute processes are mutually exclusive; that is, mechanical and atomistic properties are complementary. In a similar way, complementarity has also been applied to the relations between stationary states of an atom and intra-atomic motion of electrons. The application of the concept of stationary state excludes the possibility of following the movement of individual electrons inside the atom, and vice versa.<sup>61</sup> Also in connection with stationary states it was pointed out that there are complementarity relations between a univocal definition of atomic energy and a description of the atom's evolution in time.<sup>62</sup> Finally, still within atomic physics, complementarity was applied to the relations between the individual components of a system and the system made up of them.<sup>63</sup>

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Outside physics, too, complementarity, though vaguely defined, seems susceptible of some applications. It is always the same methodological principle. There is no unique, clearcut image of our world of experience. We must patiently piece together several complementary perspectives, taken from different standpoints, if we are to describe one phenomenon in its fullness. There is complementarity, for instance, in the knowledge of life. The vitalist thesis that life has its "own" laws and the mechanist thesis that the physico-chemical laws apply "without further qualification" in living matter need not necessarily be contradictory.<sup>64</sup> Moreover, complementarity can be applied even to psychology.<sup>65</sup>

As a conclusion from all the preceding considerations we may say that the principle of complementarity has a twofold meaning, one negative and one positive. As a negative result, complementarity points out the intrinsic inadequacy, when applied to microphysics, of the classical concept of an observation that does not disturb reality observed, since complementary aspects are due to the interaction of

<sup>64</sup>Of course, physicists do not positively suggest any solution but only envisage the negative side of the question. "... il faut observer que l'étude des phénomènes vitaux ne nous entraîne pas seulement dans le domaine de la théorie atomique où nous fait défaut l'idéalisation habituelle d'une distinction nette entre phénomène et observation; mais en outre, l'analyse de ces phénomènes au moyen des concepts physiques est soumise à une autre limite essentielle, provenant de ce que, si l'on veut pousser l'observation d'un organisme aussi loin que possible au point de vue de la théorie atomique, il faut pratiquer sur lui une intervention qui le tue. En d'autres terms: *l'application stricte des concepts adaptés à la description des phénomènes de la Nature inanimée exclut toute utilisation des lois des phénomènes vitaux*" (Bohr, *La Théorie atomique*, p. 19).

<sup>65</sup>Bohr, *ibid.*, p. 91. Pauli, "Die philosophische Bedeutung der Idee der Komplementarität," *Experientia*, vi (1950), 74 f.

<sup>66</sup>"L'essentiel dans tout cela, c'est que les résultats des mesures constituant les

connaissances du savant ne décriront pas l'univers physique tel qu'il est, mais tel qu'il est connu par le savant à la suite d'expériences comportant des perturbations inconnues et incontrôlables . . . (La physique) n'est plus la contemplation passive d'un univers figé: elle devient une lutte corps à corps où le savant parvient à arracher au monde physique qu'il voudrait connaître quelques renseignements toujours partiels, lui permettant de faire des prévisions incomplètes et, en général, seulement *probables*" (L. de Broglie, *Physique et microphysique* [Paris: Albin Michel, 1947], pp. 149 f.).

From this state of affairs it follows that the definition of physical phenomenon is to be changed. It is no longer a physical event as it happens independently of the observer: *phenomenon* refers now "to the observations obtained under specified circumstances, including an account of the whole experimental arrangement" (Bohr, "Discussion with Einstein," p. 237).

As a consequence scientists sometimes speak—in a most unfortunate way—of no objectivity of physical knowledge in quantum theory.



the object with instruments. Observation in the atomic realm is possible only at the expense of absolute observability.<sup>98</sup> As for the positive side, however, complementarity's merits are less clearly recognizable. But it is necessary to admit that, at least confusedly, the principle validly contributed to reveal a most important fact, that the physical world is far more complex than classical theory had thought it. Light and matter, most obvious physical things, appear now to us less inadequately in their somewhat mysterious nature.

#### IV. Complementarity Implications

Complementarity, if the physical theory is accepted in its full meaning, may bring about a change in outlook in the philosophic conception of the material world.

Actually complementarity teaches us that perceptibility of the world picture is by no means an unconditioned demand for science. What we know about atoms has necessarily a space-time framework, for it comes from experiments, which must be carried out in space and time. But the fact that features we are informed on have contradictory aspects signifies that we are not entitled to naively attribute to the atom as its properties the results of our quantitative measurements. The experiment, in fact, is a violation of nature, which must react to our imposition, and we state in formulae the laws of such reactions. But every such statement is valid only in relation to the experiment through which it was obtained and cannot be generalized to a hypothetical undisturbed state of microentities.

An atomic 'particle' is a physical reality which lies beyond the limits of immediate perception, and which we can no longer make accessible to perception by describing it in our spatial and temporal concepts. It is therefore, strictly speaking, neither a particle nor a wave. But in order to acquire any knowledge of it at all, we must bring it into contact with some sort of measuring apparatus; in the simplest case with a microscope or a diffraction grating. The reaction of the measuring apparatus to the atomic configuration we are then driven to interpret in our perceptual concepts: 'a particle was seen here and here' or 'a wave of this

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and this length was diffracted'. The concepts 'particle' and 'wave' or, more exactly, 'spatially discontinuous event' appear therefore as interpretations demanded by the forms of our perception for processes that are no longer immediately perceptible.<sup>67</sup>

Are we, then, entitled to draw the conclusion that mechanism is doomed? The theory seems to point strongly to that direction. For mechanism considered the world as an association of observable objects moving about according to precisely knowable laws, so that one

<sup>67</sup>C. F. v. Weizsäcker, *The World View of Physics* (Univ. of Chicago Press, 1952), p. 45.

<sup>68</sup>P. A. M. Dirac, *The Principles of Quantum Mechanics* (Oxford: Clarendon Press, 1947), p. vii.

<sup>69</sup>L. de Broglie, *Éléments de théorie des quanta et de mécanique ondulatoire* (Paris: Gauthier-Villars, 1953), pp. 219 f.

<sup>70</sup>P. Jordan, *Die Physik des 20. Jahrhunderts* (Braunschweig: Vieweg, 1936), pp. 112 f.

<sup>71</sup>"The concept of the atom in itself has only the negative significance of showing us what sort of concepts we ought not to introduce into physics. Not even objective physical existence—that is, the capacity of having physically definable predicates, even if we do not know them—can be attributed to the 'atom in itself'" (Weizsäcker, *World View of Physics*, p. 122).

<sup>72</sup>"Je ne puis m'empêcher de croire que le cadre de la relativité généralisée . . . suffit pour rendre compte des phénomènes (quantiques). Conformément au rêve de Descartes, qui vouait la physique théorique à l'étude géométrique de la matière en mouvement, il réduit la nature à une substance unique, matérielle, descriptible géométriquement, dont les formes successives, en perpétuelle transformation, rendent compte de la prodigieuse diversité des phénomènes élémentaires" (Vigier, "Physique relativiste et physique quantique," p. 111).

<sup>73</sup>"Le postulat quantique . . . exprime que toute observation des phénomènes atomiques entraîne une interaction finie avec l'instrument d'observation; on ne

peut par conséquent attribuer ni aux phénomènes ni à l'instrument d'observation une réalité physique autonome au sens ordinaire du mot" (Bohr, *La Théorie atomique*, p. 50).

<sup>74</sup>*Ibid.*, p. 74.

<sup>75</sup>*Ibid.*

<sup>76</sup>Pauli, *Experientia*, vi (1950), 74.

<sup>77</sup>L. de Broglie, *Physique et microphysique*, pp. 143 f.

<sup>78</sup>Let us hint at just one aspect of the epistemological problem. While atomic physics seems to have outgrown the Cartesian ideal of clear and distinct ideas taken from the world of intuition, it must evidently always have recourse to such concepts—as they are the only possible ones. These concepts in atomic physics, however, cannot be used in an intuitive way but must be taken in a figurative sense. The similarity of the word-content of physicists and philosophers about this problem is remarkable.

Philosophers talk of analogy—*similitudo quaedam dissimilis*. "Ondes et corpuscules univoquement conçus sont inconciliables, mais l'analogie nous permet de nuancer les notions, de telle sorte que nous puissions les concilier. Ainsi, par l'introduction du concept analogue, nous pouvons donner un sens plein à la Complémentarité de la mécanique ondulatoire. . . . Mais si les notions sont prises en sens univoque, il n'y a pas lieu pour des ajustements; l'onde et le corpuscule sont simplement juxtaposés et ne peuvent être reliées entre eux que par des relations de probabilité. Pour employer les deux notions dans une certaine mesure, même simultanément, il faut renoncer à leur caractère univoque. Parler

could form a clear picture in space and time of the whole scheme. Now complementarity has demonstrated that there are events in the physical world which cannot be represented against the background of space and time. So we come to the conclusion that the fundamental laws of nature "do not govern the world as it appears in our mental picture in any very direct way, but instead they control a substratum of which we cannot form a mental picture without introducing irrelevancies."<sup>68</sup>

Yet the very successes of complementarity present new and difficult problems both in the epistemological and ontological field. What is, in fact, the meaning of statements like the following: "A physical magnitude before the experiment has only possible values,"<sup>69</sup> "It is the experiment that forces the electron within the atom to take a sharply defined position,"<sup>70</sup> "We cannot know the atom in itself"?<sup>71</sup>

Quantum theory, whose complementarity is the highest conquest, seems unable to give an adequate answer. Even worse, it seems also unable to solve the dispute between mechanistic<sup>72</sup> and positivistic<sup>73</sup> interpretations of those philosophic problems. Nor is such a situation difficult to understand. Any physical theory, indeed, finds it very hard to avoid both extremes, since it must be positive without being positivistic and must apply mathematics to the description of reality without being mechanistic.

Complementarity reveals itself equally inadequate as regards the ontological value of complementary aspects. The theory says that quantum mechanics solutions have an intuitive meaning only insofar as the particles can be considered free.<sup>74</sup> But it gives no precise answer to the ontological question. Both "wave" and "corpuscle" are abstractions;<sup>75</sup> the concepts have obviously symbolic character;<sup>76</sup> they are two opposite idealizations.<sup>77</sup> Complementarity, therefore, can be viewed as an adequate interpretation of facts only on the positive-experimental level. As for the philosophic level, its contribution is invaluable, but mostly negative; it informs philosophers on what micro-reality certainly is not. For a complete interpretation of the material world the principle obviously needs the help of philosophy. Complementarity, then, may be an instance for stressing the need and possibility<sup>78</sup> of co-operation between atomic physics and philosophy.

*Philosophy in Atomic Physics: Complementarity*

Enrico Cantore, S.J

des aspects corpusculaires au lieu des corpuscules c'est déjà analoguer la notion de corpuscule" (F. Selvaggi, s.j., "Le rôle de l'analogie dans les théories physiques," *Proceedings of the XIth International Congress of Philosophy* [Louvain: Nauwelaerts, 1953], vi, 142 f.) See also W. Büchel, S.J., "Zur Naturphilosophischerkenntnistheoretischen Problematik der Quantenphysik," *Scholastik*, xxviii (1953), 183 f. and, by the same author, "Die Diskussion um die Interpretation der Quantenphysik," *Scholastik* xxix (1954), 242 f.

Now, analogy's typical features, except the name, are to be found also in physicists' writings. Dealing with uncertainty relations, Bohr explicitly remarks: ". . . it is important to recognize that no unambiguous interpretation of such relations can be given in words suited to describe a situation in which physical attributes are objectified in a classical way" ("On the Notions of Causality and Complementarity,"

p. 52). It is evidently analogy that is meant by Born when the author speaks of the scientific procedure of "adapting" or "generalizing" a concept when it "in its original meaning turns out to be too narrow." After having discussed the concept of number (from natural to algebraic, transcendental, complex) as an example of logical and fruitful generalization of an idea, he concludes about atomic particles: "I maintain that the use of the concept of particle has to be justified in the same way. It must satisfy two conditions: First it must share some (not in the least all) properties of the primitive idea of particle (to be part of matter in bulk, of which it can be regarded as composed), and secondly this primitive idea must be a special, or better, limiting case. Now it is exactly in this sense that the particle concept is used in quantum mechanics" ("The Interpretation of Quantum Mechanics," p. 101).



## NOTES AND DISCUSSION

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### Problems in the Teaching of Contemporary Philosophy

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#### I. The Field of Modern Philosophy

It is generally agreed that the term "modern philosophy" embraces at least the following men: Descartes, Leibniz, Spinoza, Locke, Berkeley, Hume, Kant, Fichte, Schelling, Hegel, Comte, J. S. Mill, Schopenhauer, and perhaps also Nietzsche and Bergson. Individual historians of modern philosophy might each add a few names to this list; but there would be no general agreement about the additions, whereas there would be general agreement that none of these should be omitted. These thirteen, or fifteen, are the principal names on any list.

Not only is there general agreement about who the men are who are denoted by the term "modern philosophers," but there is also general agreement about the schematization which most effectively organizes these philosophers into an intellectually assimilable field of study. So it is customary to group the first three as rationalists; the second three as empiricists; to designate Kant as a critical philosopher who attempted to synthesize rationalism and empiricism; to group Fichte, Schelling, and Hegel as idealists, who represent that residue from the break-up of the Kantian synthesis, which leans in the direction of the earlier rationalism; to group Comte and J. S. Mill as positivists who represent the other residue from the break-up of the Kantian synthesis, which leans in the direction of the earlier empiricism; to group Schopenhauer and—if they are included in modern philosophy—Nietzsche and Bergson as philosophers of life who attempt to synthesize idealism and positivism.

To be sure, any schematization in the pure or social sciences, in the humanities, or in philosophy suffers from serious limitations and must not be taken with ultimate seriousness. But despite its limited validity, such a scheme does enable the student to see the forest as well as the trees, so that as a pedagogical hypothesis it does much good and little harm.

In the field of modern philosophy, then, one observes three significant points of agreement: (1) who the men are who are denoted by the term "modern philosophers"; (2) what the schematization is which enables the

student to relate these men; (3) what the order of presentation should be—rationalists, empiricists, Kant, idealists, positivists, vitalists.

## II. The Problems of Contemporary Philosophy

There are no such general agreements regarding the field of contemporary philosophy. Just which men are denoted by the term “contemporary philosophers,” what the schematization is which best manifests the relationships between these unidentified men, in what sequence they should be studied—none of these points is a matter of general agreement. Even more remarkable is the lack of agreement on what the phrase “contemporary philosophy” means. For until that is clear there can be no agreement on the men denoted by the term, or on the scheme showing their relationships.

## III. First Problem: The Meaning of “Contemporary Philosophy”

It would seem possible to interpret the word “contemporary” very literally and to decide that a “contemporary philosopher” is any philosopher alive at the moment the term is used. But such a literal definition suffers from at least two disadvantages. First, it omits from the rank of philosophers certain very important figures not denoted by the term “modern philosophers” and yet not alive today—such men as Dewey, Whitehead, Husserl, Schlick. Second, any list of contemporary philosophers would be revisable from moment to moment depending upon the contingency of death.

To avoid these inconveniences one might define a contemporary philosopher as a twentieth-century philosopher. But this definition also has two disadvantages.

First, it would rule out of philosophy certain very important figures who are not included among the modern philosophers and who did not live in the twentieth century—Kierkegaard and Marx, for example. The second disadvantage is much deeper. That disadvantage is this: it is unphilosophical to divide periods of philosophy according to time—for example, the twentieth century. Two different periods of philosophy must differ *philosophically*; otherwise there are not two. So medieval philosophy differed from ancient philosophy *in the philosophical questions it raised* and not merely in time. Similarly, modern philosophy differed from medieval *in the questions it raised* and not merely in time. So, if the philosophy of our time merely prolongs into the twentieth century the philosophical problems entertained from Descartes to Schopenhauer or Bergson, then *there is no such thing as contemporary philosophy* in any philosophical sense; there is only the contemporary phase of modern philosophy. On the other hand, if the

philosophers of our time are raising genuinely new philosophical problems, if they are asking, not the questions posed by modern philosophers, but new questions of their own, then *there is such a thing as contemporary philosophy*; but it is as different from modern as modern is from medieval, and as medieval is from ancient.

Involved in the question, "What does 'contemporary philosophy' mean?" is this other question, "Has modern philosophy come to an end, and if so, have we entered upon a genuinely new period in philosophy?" Unless the answer to both parts of the second question is yes, the first question is itself devoid of philosophical meaning.

I suggest that the answer to both parts of the second question is yes. Modern philosophy has come to an end because its characteristic problems (the epistemological problem, the mind-body problem, the idealism-realism problem, the problem of God, the space-time-matter problem, the problem of causality) no longer agitate the minds of philosophers. So, for example, the problem of God is obviated by opting for postulatory theism, as in Kierkegaard, or for postulatory atheism, as in Nietzsche.

But a genuinely new era has begun in philosophy because new problems are being debated. The problems preoccupying the philosophers of this time fall largely into two areas: (1) problems associated with philosophic method and meaning; (2) problems associated with the "new man."

The related problems of method and of meaning (pragmatism, phenomenology, and analysis) are not problems about the method of communicating already achieved philosophical truth (*via iudicii*); the Aristotelian logic solved that problem by providing an organon, a rhetoric, for the communication of philosophy. The methodological problem of our time is concerned with the method of discovering philosophical truth (*via inventionis*). Philosophy is learning, rather late in the day, to scrutinize its own questions, to explore the twin problems of sources and procedures for arriving at answers, to become decently self-conscious.

The problem of the "new man" (Marxism and existentialism) is the problem, not of meaning in general, but of the meaning of man; of how the individual person shall transcend the limitations of his individuality, his society, and even of his finitude; of how he shall emerge into some kind of pure autonomy, pure freedom, transcendence.

If the convictions that modern philosophy has ended and that contemporary philosophy has begun are valid, then it is possible to determine by a philosophical test whether a given philosopher is modern or contemporary—the simple test of which set of questions he asks. So, for example, Marx, Kierkegaard, and Nietzsche are contemporary philosophers because they are preoccupied with the contemporary problem of the "new

man." On the other hand, Brand Blanshard is a modern philosopher because he is concerned with the modern problem of idealism. More difficult to classify are Santayana, Bergson, and Whitehead; perhaps the safest course is to refuse to be categorical about them and to consider them as transitional figures.

Contemporary philosophy, then, turns out to mean those philosophies which are concerned primarily with the problems of method and the problems of the "new man." It may be very sensibly objected that neither of these problems is specifically contemporary, since they are found not only in contemporary philosophy but also in modern, medieval, and even ancient philosophy. Take the problems of method and meaning, for example. Surely those problems agitated moderns like Descartes and Locke; surely they concerned at least the late medieval logicians—indeed, it may be possible to trace contemporary logical analysis itself to medieval logic; surely method was one of the lifelong preoccupations not only of Aristotle but also of Socrates and Plato. Similarly the problems of the "new man" can be traced through modern and medieval philosophy back to Socrates (Kierkegaard himself saw this affinity) and Plato (the *Republic* is precisely a study of the "new man," socially and individually). Stoicism was a concurrent effort to delineate the "new man."

There is a sense in which there are no new questions in philosophy—the pre-Socratics raised them all. And in that sense, there are no historical periods in philosophy; there is only the continuing philosophic enterprise. But there *are* new emphases and new ways of conceiving the old questions; and from *that* point of view there *are* historical periods in philosophy. So to the modern, medieval, and ancient philosophers, the problems of method and of meaning were prolegomena to the establishment of systematic conclusions; but to the contemporary methodologist they are the only valid philosophic problems. What is new about contemporary methodological philosophies is the purity with which they raise their problems, the determination to treat these problems for their own sake and not as necessary preliminaries, and the refusal to admit into philosophy any datum other than what is immediately given in the problem of method itself. In that sense, the methodological philosophies are dealing with a new problem.

The contemporary "new-man" philosophy, whether Marxian or existentialist, similarly differs from any earlier "new-man" philosophy. Not only does it restrict philosophy to the study of man (existentialism) or at least subordinate all other problems to the man's social needs (Marxism), but it has to it a new quality of anthropocentricity—it is concerned with the post-Christian man, with the man who has known and rejected either Christianity, or, at the very least, Christendom. By and large, the "new-man"



philosophy in either its Marxian or its existentialist phase seeks to make a man who is the summit of being (that would not be altogether new), *after twenty centuries of knowing that he is not the summit of being*—and that is new. It is a new kind of “new man” that contemporary “new-man” philosophy seeks—a new man who believes in his own power to overcome his own finitude. Christianity had promised a genuinely new man, and the “new-man” philosophy has secularized that promise; hence its peculiar *depth*. The genuine and altogether supernatural transformation of man which Christianity effects through its liturgy; the death with Christ to sin and nature; the gloriously victorious resurrection with Christ to the new supernatural life, begun through baptism and achieved through the Eucharist; and the eschatological expectation of the final kingdom of Christ in which we, as members of what St. Augustine calls the “integral Christ,” shall reign with Him in a new heaven and a new earth—it is precisely this genuine, this objective, this even-now-being-realized promise on which the “new-man” philosophy feeds. It is no dream but a memory of a real possibility that fires the “new-man” philosophy. The “new-man” philosophy is new precisely because it is neither pre-Christian, like Plato’s and Socrates’s, nor extra-Christian, like that of the Renaissance and modern philosophy; it is the Christian expectation itself, secularized.

I think that, in the senses indicated, it can be said that contemporary philosophy is raising new questions—the problems of method and the problems of the “new man”; and it is to be anticipated that, however audacious some or all of these questions may be, however open to religious criticism the intellectual climate in which they can arise, still, once asked they must be answered; and the answers will contain, at least incidentally, new and precious philosophical insights which not even the believer may overlook.

#### IV. Second Problem: Who Are the Contemporary Philosophers?

The weeding out which history so dispassionately accomplishes has reduced the number of major modern philosophies to about fifteen. That process has yet to be applied to contemporary philosophy. It is therefore antecedently probable that any tentative list of contemporary philosophers must be somewhat longer than fifteen—long enough to omit no major figure, short enough to be restricted to men of international reputation.

One possible list of contemporary philosophers, understood in the sense defined, would be this: Bergson, Carnap, Dewey, Heidegger, Husserl, James, Jaspers, Kierkegaard, Marcel, Maritain, Marx, G. E. Moore,

Nietzsche, Peirce, Reichenbach, Russell, Santayana, Sartre, Schlick, Whitehead, and Wittgenstein.

## V. Third Problem: Schematization

It would be as unphilosophical to ignore affinities as it would be to force them. It is evident, for example, that Peirce, James, and Dewey should be grouped together as pragmatists and that Kierkegaard, Nietzsche, Heidegger, Sartre, Jaspers, and Marcel should be grouped together as existentialists—provided that such groupings are understood not to deny significant differences.

Similarly, Moore and Russell might be grouped as logical analysts; Schlick, Carnap, and Wittgenstein as logical positivists; Reichenbach might be considered a representative of scientific empiricism. Moreover, the last two groups (logical positivists and scientific empiricists) are often grouped as logical empiricists; and all three (logical analysts, logical positivists, and scientific empiricists) might be grouped as analytic philosophers or philosophic analysts.

Husserl is a representative of phenomenology; Marx of Marxism; Maritain of Thomism. Santayana, Bergson, and Whitehead, as already indicated, are conveniently treated as transitional philosophers.

From the twenty-one contemporary philosophers listed above, there would appear to emerge seven groupings: the transitionalists (Santayana, Bergson, Whitehead), the pragmatists (Peirce, James, Dewey), the phenomenologists (Husserl), the analysts (Moore, Russell, Schlick, Carnap, Wittgenstein, Reichenbach), the Marxists (Marx and, possibly, Stalin), the existentialists (Kierkegaard, Nietzsche, Heidegger, Jaspers, Sartre, Marcel), and the Thomists (Maritain).

But significant relations appear to exist not only between the individual philosophers included in one grouping but also between some of the groupings themselves. So the analysts and the pragmatists are both concerned primarily with the problem of method; indeed, it would not seem too much to say that Peirce anticipated many of the positions of the analysts. But this term "methodologists" or "methodological philosophers" would embrace not only the pragmatists and the analysts but also the phenomenologists; for Husserl was convinced, at least in his earlier years, that his method prescinded from any given metaphysical position and was purely a method.

Let us, then, use this term "methodologists" to connote philosophers whose chief, if not only, concern is with the method of philosophy; philosophers who judge that any philosophical conclusion is incidental to the method employed and, therefore, tentative and revisible in the light of

improvements in method; philosophers who like to ask "What do you mean?" and who expect an answer in terms of data, phenomena, more or less immediately given in human experience; philosophers who are problem-centered rather than system-centered and who are suspicious of "systems" and "world views"; philosophers who are simply uncomfortable in the face of massive philosophical structures such as Thomism because they cannot exorcise from their minds the suspicion of meaninglessness. Let us, further, use the term "methodologists" to denote analysts, pragmatists, and phenomenologists.

It is tempting to group the four remaining types of contemporary philosophy (transitionalists, Marxists, existentialists, Thomists) simply as "systematists," as opposed to methodologists. By this term one would connote philosophers to whom content, conclusions, and not method were of primary importance; philosophers who have a teaching, who approximate to a world view (transitionalists, Marxists, Thomists) or, at least, like Socrates, to a view of man (existentialists); philosophers who are persuaded that reality is, in some sense, one, so that there can be a coherent explanation of it in its totality.

The categorizing of these four as "systematic" is not only tempting; it is also approximately true. Yet it will not serve as a division of contemporary philosophy, since there is nothing specifically contemporary about the notion of system in philosophy. It is necessary, rather, to locate what makes these systems contemporary, to search out, and to name the problems that give rise to these systems.

Let us leave aside the transitionalists as being not so much contemporary philosophers as bridges between the modern and the contemporary. Let us also postpone Thomism to a later section. We are left, then, with Marxism and existentialism; and our problem is whether as between these two there is any common philosophic preoccupation which would justify our grouping them together, as analysis and pragmatism may be grouped as methodologies.

Categories such as "humanism," "naturalism," "secularism," "atheism," should be avoided. In the first place, there is nothing specifically contemporary about these "isms." In the second place, these "isms" could be predicated of some or all of the contemporary methodological philosophies as significantly as they can of Marxism and existentialism. Finally, and most importantly, some, if not all of these terms, are used so elastically as to be more serviceable for rhetoric than for philosophy.

What existentialism and Marxism have in common and what characterizes them as *contemporary* systems of philosophy is their preoccupation with the second problem mentioned above—the problem of making the new man;

the problem of transcending self and society, of achieving autonomy, freedom; the problem of salvation, whether supernatural (Kierkegaard and Marcel) or natural (Nietzsche, Heidegger, Jaspers, Sartre, the Marxists). I do not, for a moment, deny the significant differences between the Marxists and the existentialists or, for that matter, among the existentialists themselves. I say only that both desire to unmake one man (the man of Christendom; the bourgeois, industrialist-capitalist man; the outward, selfish man) and to make a new man, either the man who achieves autonomy by identification of self with the laws of dialecticism and materialism in nature, man, society, and history (Marxism) or the man who achieves autonomy through inwardness, through experiencing the farthest limits of his creaturehood and therein discovers either a way of transcendence or a courage to live with the need for a transcendence which is unachievable (existentialism). If it makes sense to include both pragmatism and analysis under the category of "methodological philosophy," then equally it makes sense to include both Marxism and existentialism under the category of the "new-man" philosophy or some less cumbersome equivalent.

It remains, then, that the seven groupings of contemporary philosophers (transitionalists, pragmatists, phenomenologists, analysts, Marxists, existentialists, and Thomists) are actually reducible to four (transitionalists, methodologists, "new-man" philosophers, and Thomists).

## VI. Fourth Problem: Sequence

It seems clear that, if the transitionalists really are transitional, then any course in contemporary philosophy will begin with them. It seems equally clear that any such course conducted by a Thomist will conclude with contemporary Thomism.

What is not clear is two further points: (1) whether the methodological philosophy should precede or follow the "new-man" philosophy; (2) within each of the two last-named categories, what sequence is to be followed? Within methodological philosophy what is the proper sequence as between pragmatism, phenomenology, and analysis? And within "new-man" philosophy, should Marxism precede or follow existentialism?

The problem here is the explication of a *principle* on the basis of which to determine sequence. If chronology is the proper principle, then the "new-man" philosophy should precede the methodological, since both Marx and Kierkegaard were born before any of the methodologists. Moreover, existentialism should, on this principle, precede Marxism, since Kierkegaard (1813) was born several years before Marx (1818). On the same principle, pragmatism should precede phenomenology (Peirce, 1839; Husserl, 1859),



and phenomenology should precede analysis (Russell, 1872). But if chronology is not the right principle, then one faces the task of elaborating and justifying some other principle. For my own part, I have not yet succeeded in doing this.

So far, then, the arrangement of a course in contemporary philosophy would appear to be as follows:

A. *Transitional*: Bergson (1859), Whitehead (1861), Santayana (1863).

B. *"New-Man" Philosophy*:

1. *Existentialism*: Kierkegaard (1813), Nietzsche (1844), Marcel (1877), Jaspers (1883), Heidegger (1889), Sartre (1905).

2. *Marxism*: Marx (1818) and, possibly, Stalin.

C. *Methodological Philosophy*:

1. *Pragmatism*: Peirce (1839), James (1842), Dewey (1859).

2. *Phenomenology*: Husserl (1859).

3. *Analysis*: Russell (1872), Moore (1873), Schlick (1882), Wittgenstein (1889), Carnap (1891), Reichenbach (1891).

D. *Thomism*: Maritain (1882).

## VII. The Problem of Thomism

If contemporary philosophy is defined in terms of two areas of problems (methodology and the "new man") and if Thomists do not discuss these problems at all, then Thomism is no part of contemporary philosophy; it is, rather, the contemporary phase of a medieval philosophy. On the other hand, if Thomists, or some significant segment of Thomists, do seriously entertain contemporary problems, then, despite its medieval roots, Thomism is a contemporary philosophy.

Before addressing myself to any answer to our present question—"Is Thomism a contemporary philosophy? that is, do some Thomists evidence preoccupation with specifically contemporary philosophic problems?"—I should indicate three preliminary reservations.

First, the adjective "contemporary" used to describe a philosophy is not necessarily honorific; and the adjective "noncontemporary" is not necessarily pejorative. The great question about any philosophy is not whether it is contemporary but rather whether it is true; that is, are its problems valid (whether contemporary or not), and are its solutions to those problems demonstrably true? So, much of Platonism and much of Aristotelianism is *true*, though little, if any, of either is contemporary.

I should therefore, for my own part, care very little whether Thomism were contemporary or not. It is true, and one treasures it for that reason, as one also treasures Platonism and Aristotelianism. And to the degree that

any philosophy is true, it is also relevant to one's own intellectual life, however unrelated it may be to the problems principally agitating the minds of contemporary philosophers.

On the other hand, if it should turn out that Thomism is a contemporary philosophy, I should regard that fact as promising, for I should anticipate that the Thomist and the non-Thomist branches of contemporary philosophy might strengthen each other reciprocally.

One therefore raises this question about the contemporaneity of Thomism with intellectual interest but with detachment too. For the Thomist, nothing crucial is at stake in either possible answer to the question.

As to my second preliminary reservation, I should like to avoid any clever rhetoric about the "perennial" character of Thomism, which would purport to show that Thomism is necessarily contemporary because "perennial." I do not, for a moment, disparage the notion of a perennial philosophy or the judgment that Thomism is that philosophy. I would merely point out that the notion of a perennial philosophy is still problematic and that it might be prudent to avoid use of it until that problematic is worked out in greater detail—a project brilliantly begun by Professor James Collins.<sup>1</sup>

Thirdly, I should like to avoid, too, phrasing the question about the contemporaneity of Thomism in too sweeping a way. It is evident, I think, that many living Thomists are not contemporary philosophers; that is, many of them have no interest in contemporary philosophical problems, a state of affairs which I find, for my own part, perfectly proper. It would be an enormous loss if we all became contemporary philosophers so that there were left no living Platonists, no living Aristotelians, no living Augustinians, no living Thomists. Hence my question is not whether *all* living Thomists are contemporary philosophers but whether *some* are. If I may use a dis-

<sup>1</sup>James Collins, "The Problem of a *Philosophia Perennis*," *Thought*, xxviii (winter 1953-54), 571-97.

<sup>2</sup>"Developmental Thomism," *Thomist*, xix (Jan., 1956), 1-21.

<sup>3</sup>Trans. Galantière. New York: Pantheon Books, 1948.

<sup>4</sup>New York: Sheed and Ward, 1940. See especially pp. 1-61.

<sup>5</sup>Trans. Adamson. New York: Chas. Scribner's Sons, 1938.

<sup>6</sup>Chicago: Univ. of Chicago Press, 1951.

<sup>7</sup>Ed. Evans and Ward. New York: Chas. Scribner's Sons, 1955.

<sup>8</sup>Pp. 121-226. New York: Chas. Scribner's Sons, 1953.

<sup>9</sup>Trans. Wall and Adamson. New York: Chas. Scribner's Sons, 1938.

<sup>10</sup>Trans. Wall. New York: Chas. Scribner's Sons, 1940.

<sup>11</sup>Pp. 3-117.

<sup>12</sup>*The Existentialists* (Chicago: Henry Regnery Co., 1952); *The Mind of Kierkegaard* (Chicago: Henry Regnery Co., 1953).

<sup>13</sup>Trans. Trask. New York: Henry Holt & Co., 1947.

<sup>14</sup>Chicago: Univ. of Chicago Press, 1951.

<sup>15</sup>*Communism and Christianity* (Baltimore: Penguin Books, 1956).

<sup>16</sup>*The Mind and Heart of Love* (New York: Henry Holt & Co., 1947).

inction which I have tried to explicate in an article elsewhere,<sup>2</sup> I would phrase the question this way: Granted that conservative Thomists are not contemporary philosophers, what of developmental Thomists? Are they or are they not contemporary philosophers?

I think that they are. For they have entertained the problems which define contemporary philosophy, either directly by themselves reflecting on those problems or indirectly by their reflections on the contemporary philosophies.

In this respect Maritain occupies a unique position, for he has dealt with all of the problems of contemporary philosophy both directly and indirectly. The problem of the "new man" in its personal or existential dimension occupied him in *Existence and the Existent*<sup>3</sup> and even before that in a scattered way in *A Preface to Metaphysics*.<sup>4</sup> The same problem in its social or Marxian dimension is the theme of his numerous studies in the philosophy of culture and in his social and political writings, all of the works clustered around *True Humanism*<sup>5</sup> and *Man and the State*<sup>6</sup> and anthologized in *The Social and Political Philosophy of Jacques Maritain*.<sup>7</sup> Relevant also to the social dimension of the "new-man" problem is the second part of *The Range of Reason*<sup>8</sup> and numerous short essays in various books and periodicals.

The problems of method and of meaning are one of the recurrent themes in *The Degrees of Knowledge*<sup>9</sup> and the works clustered around it; for example, *Science and Wisdom*<sup>10</sup> and the first part of *The Range of Reason*.<sup>11</sup> In these, and in various shorter essays, he has explicitly dealt with the problems occupying pragmatism, logical positivism, and methodology generally.

But Maritain is by no means alone. The work of James Collins on the problems raised by existentialism<sup>12</sup> is, superficially, a historical and therefore an indirect approach of a Thomist to contemporary thought; but the terse, profound, and balanced evaluation is itself a direct handling of the problems raised. Yves Simon has brought a deep and a strangely fresh Thomism to the problems which engage Marxists, especially in the final chapter of his *Community of the Free*<sup>13</sup> and in the final chapter of his *The Philosophy of Democratic Government*.<sup>14</sup> Father M. C. D'Arcy has not only given his attention to the problems raised by Marxism<sup>15</sup> but also to one of the most urgent problems raised by the existentialists, the problem of love.<sup>16</sup>

Other trends among Thomists reinforce this conviction that Thomism is, in part, a contemporary philosophy. The methodological philosophies are closely allied to recent advances in mathematics and physics, and many Thomists evidence a willingness to rethink their philosophy of nature in the light of these advances. Similarly, the "new-man" philosophies are, to some degree, related to the evolutionary hypothesis in biology and the

psychoanalytic technique in psychiatry and psychology; and many Thomists are open to re-examining their philosophy of organism and of man in the light of whatever solid evidence there may be in these fields.

One may conclude, I think, that one significant group of Thomists is to be numbered among the contemporary philosophers.

## VIII. Bibliography for Beginners

Not the least of the practical problems connected with the teaching of contemporary philosophy at the undergraduate level is the problem of readings in the various philosophers. There are needed works sufficiently short to be mastered and sufficiently inexpensive to be purchased. I therefore offer here no complete bibliography of contemporary philosophy. My list is triply restricted, for I mention only books, to the exclusion of all periodical literature; only books published in English in the United States and currently available; and only three classes of such books—namely, the inexpensive paperback, the anthology, and the Thomist evaluations of contemporary philosophy with which I happen to be familiar.

### A. Paperbacks<sup>17</sup>

#### 1. *Titles from the Twenty-one Contemporary Philosophers Listed Above*

Bergson: *Introduction to Metaphysics* (Liberal Arts Press)

*The Two Sources of Morality and Religion* (Doubleday & Co.)

Dewey: *Essays in Experimental Logic* (Dover Pubns.)

*Reconstruction in Philosophy* (New American Library of World Literature [hereafter N.A.L.W.L.] )

*Philosophy of Education* (Littlefield, Adams & Co.)

*The Child and the Curriculum* and *The School and Society* (Univ. of Chicago Press)

James: *The Will to Believe* and *Human Immortality* (Dover Pubns.)

*Pragmatism* and *Four Essays from the Meaning of Truth* (Noonday Press)

*Pragmatism: Selections* (Henry Regnery Co.)

*Essays in Pragmatism* (Hafner Pub. Co.)

Kierkegaard: *Fear and Trembling* and *Sickness unto Death* (Doubleday & Co.)

Maritain: *Creative Intuition in Art and Poetry* (Noonday Press)

<sup>17</sup>As of April 1, 1956. Significant new titles are being added regularly by various publishers. Probably the only way to keep track of what is currently available is to

subscribe to *Paperbound Books*, published three times a year by R. R. Bowker, New York.



- Marx: *Communist Manifesto* (Henry Regnery Co.)  
*The Quintessence of Dialectical Materialism* (Academic Press)
- Nietzsche: *Beyond Good and Evil* (Henry Regnery Co.)  
*The Use and Abuse of History* (Liberal Arts Press)
- Peirce: *Essays in the Philosophy of Science* (Liberal Arts Press)  
*Philosophical Writings of Peirce* (Dover Pubns.)
- Russell: *The Conquest of Happiness* (N.A.L.W.L.)  
*The Analysis of Matter* (Dover Pubns.)  
*An Essay on the Foundations of Geometry* (Dover Pubns.)
- Santayana: *Skepticism and Animal Faith* (Dover Pubns.)  
*The Sense of Beauty* (Dover Pubns.)  
*Three Philosophical Poets* (Doubleday & Co.)  
*Character and Opinion in the United States* (Doubleday & Co.)
- Sartre: *Intimacy* (Avon)  
*Exit and Three Other Plays* (Alfred A. Knopf)  
*Rock Wagram* (N.A.L.W.L.)
- Whitehead: *Adventures of Ideas* (N.A.L.W.L.)  
*Aims of Education* (N.A.L.W.L.)  
*Science and the Modern World* (N.A.L.W.L.)
2. Titles from Other Contemporary Philosophers
- A. J. Ayer: *Language, Truth and Logic* (Dover Pubns.)
- M. Buber: *Between Man and Man* (Beacon Press)  
*The Writings of Martin Buber* (Noonday Press)
- E. Cassirer: *An Essay on Man* (Doubleday & Co.)  
*The Myth of the State* (Doubleday & Co.)  
*The Philosophy of the Enlightenment* (Beacon Press)  
*Substance and Function and Einstein's Theory of Relativity*  
(Dover Pubns.)  
*Theory of Relativity* (Dover Pubns.)  
*The Renaissance Philosophy of Man* (Univ. of Chicago Press)
- B. Croce: *History as the Story of Liberty* (Noonday Press)
- M. C. D'Arcy: *The Mind and Heart of Love* (Noonday Press)  
*Communism and Christianity* (Penguin Books)
- C. J. Ducasse: *Art, the Critics and You* (Liberal Arts Press)
- S. Hook: *The Hero in History* (Beacon Press)  
*Marx and the Marxists: The Ambiguous Legacy* (Van Nostrand Co.)
- S. Langer: *An Introduction to Symbolic Logic* (Dover Pubns.)  
*Philosophy in a New Key* (N.A.L.W.L.)
- R. Niebuhr: *An Interpretation of Christian Ethics* (Noonday Press)

- J. Stalin: *Dialectical and Historical Materialism* (International Press)
- P. Tillich: *The Religious Situation* (Noonday Press)
3. *Paperback Anthologies*
- Runes (ed.), *Living Schools of Philosophy* (Littlefield Adams)
- White (ed.), *The Age of Analysis* (N.A.L.W.L.)
- B. Anthologies**
1. *General*
- Jarrett and McMurrin (ed.), *Contemporary Philosophy* (Henry Holt & Co.)
- Runes (ed.), *Twentieth Century Philosophy* (Philosophical Lib.)
- Also available in paperback, under title *Living Schools of Philosophy*, as noted above.
- White (ed.), *The Age of Analysis* (Houghton-Mifflin Co.)
- Also available in paperback, as above.
2. *Special Topic or Group*
- Feigl and Brodbeck (ed.), *Readings in the Philosophy of Science* (Appleton-Century-Crofts)
- Feigl and Sellars (ed.), *Readings in Philosophical Analysis* (Appleton-Century-Crofts)
- Fisch (ed.), *Classic American Philosophers* (Appleton-Century-Crofts)
- Includes Peirce, James, Dewey, Royce, Santayana, Whitehead.
3. *Individual*
- Dewey: Ratner (ed.), *Intelligence in the Modern World* (Modern Lib.)
- Edman (ed.), *The Philosophy of John Dewey* (Bobbs-Merrill)
- Kierkegaard: Bretall (ed.), *A Kierkegaard Anthology* (Princeton Univ. Press)
- Auden (ed.), *Kierkegaard* (David McKay Co.)
- Maritain: Evans and Ward (ed.), *The Social and Political Philosophy of Jacques Maritain* (Chas. Scribner's Sons)
- Nietzsche: Wright (ed.), *The Philosophy of Nietzsche* (Modern Lib.)
- Kaufmann (ed.), *The Portable Viking Nietzsche* (Viking Press)
- Santayana: Cardiff (ed.), *Atoms of Thought* (Philosophical Lib.)
- Whitehead: Northrup and Gross (ed.), *A Whitehead Anthology* (Macmillan Co.)
- C. Evaluations from the Thomist Standpoint**
1. *General*
- Vincent E. Smith, *Idea-Men of Today* (Bruce Pub. Co.)

## 2. *Special*

The relevant works of Maritain, Collins, and D'Arcy have been noted above.

Richard Butler, *The Mind of Santayana* (Henry Regnery Co.)

James Collins, *A History of Modern European Philosophy* (Bruce Pub. Co.)

For Nietzsche and Bergson

Regis Jolivet, *Introduction to Kierkegaard* (Dutton & Co.)

John M. Oesterreicher, *Walls are Crumbling* (Devon-Adair).

For Bergson and Husserl

Kurt F. Reinhardt, *The Existentialist Revolt* (Bruce Pub. Co.)

## Report on the Ninth Annual Meeting of the Missouri State Philosophy Association

ALDEN L. FISHER, *Saint Louis University*

The ninth annual meeting of the Missouri State Philosophy Association was held Friday and Saturday, October 12 and 13, 1956, at Westminster College, Fulton, Missouri. As in the past, the program consisted of three unrelated papers presented Friday afternoon, each followed by discussion; the annual association dinner, followed by the presidential address and the business meeting on Friday evening; and a symposium of three related papers, concluded by discussion from the floor, on Saturday morning.

The first paper of the Friday afternoon session, "A Typological Analysis of Social Understanding," was read by Robert S. Trotter of William Jewell College. This typological analysis, having nothing to do with "typology" as this is sometimes understood in the social sciences, consisted in a careful characterization of the different kinds and levels of analysis used in the attempt to *understand* social phenomena. While Professor Trotter modestly insisted upon the provisional character of the five general types or kinds delineated, his categories represent eminently useful tools and demonstrate genuine insight into the nature, limitations, and advantages of each of the kinds of analysis discussed. The paper had the outstanding virtue of insisting that the term "scientific" not be restricted to "objective analyses", as these were defined, but be used with equal justification for the "non-objective" forms.

Mrs. Eleanor Elrod of Fulton followed with a paper on "The Idea of Semblance as Developed by Suzanne Langer." This paper consisted of an accurate statement of Mrs. Langer's views concerning the purely formal aspects of art as expressed in her book, *Feeling and Form*. For those acquainted with Mrs. Langer's work it was disappointing that the speaker limited herself strictly to reporting Mrs. Langer's position, leaving no room in the paper or in the discussion for criticism and evaluation.

The final paper of the afternoon, "Substance and Causality in Whitehead," by Leonard J. Eslick of Saint Louis University, consisted of a penetrating analysis of the problem of substance and causality in Whitehead and Aristotle, demonstrating not only the inadequacy of Whitehead's understanding of the Aristotelian position, but also showing the fundamental failure of Whitehead to provide an alternative solution. This paper, by far the most weighty philosophically, elicited a spirited and stimulating exchange which, cut short for lack of time, was continued throughout the remainder of the afternoon and evening on an informal basis.

The presidential address by Professor Arthur Berndtson of the University of Missouri was devoted to "Beauty, Embodiment, and Art." His carefully worked out esthetic position met with considerable interest and response.

On Saturday morning A. Duff Gordon (Park College), Donald C. Hodges (University of Missouri) and Byron L. Osborne, Jr. (Stephens College) contributed to a symposium on "The Limits of Government." The discussion of these papers centered about the moral grounds for resistance by the individual to unjust governmental legislation and executive pressures. The symposium was, on the whole, disappointing. The outstanding contribution, that of Professor Hodges of the University of Missouri, was received with little understanding. There seemed to prevail a general reluctance to engage in a real exchange on this topic of current interest.

In its business meeting the Association voted to continue and extend its questionnaire survey of the offerings in philosophy and the staffs engaged in teaching philosophy in the colleges and universities of the state. It was decided also to accept the urgent invitation of the Senate Subcommittee on Disarmament and to approve the designation of six members of the Association who would contribute papers on the moral issues relevant to disarmament and testify at the hearings in Saint Louis on December 12. Linus J. Thro, S.J., of Saint Louis University was elected President of the Association for the ensuing year and Donald C. Hodges of the University of Missouri was re-elected Secretary-Treasurer. Next year's meeting, it was determined, would be held at Washington University in Saint Louis, where Morris Eames will be in charge of the program and arrangements.



## Notes on the Modal Syllogism

VENANT CAUCHY, *Fordham University*

Octave Hamelin, in his study of Aristotelian philosophy,<sup>1</sup> writes that the theory of modal syllogisms and propositions is one of the most difficult and least known parts of the *Prior Analytics*. Aristotle's treatment of the matter<sup>2</sup> does not appear equal to his great achievements in other areas. Despite widespread opposition, it seems that ancient thinkers had no acceptable substitute to offer. The purpose of this paper is to examine some of the principles on which Aristotle builds his theory of modal reasoning and to suggest a tentative reconstruction which would eliminate the shortcomings of his exposition.<sup>3</sup>

The modal syllogism is one in which either both premises are modal propositions or one premise alone is modal and the other assertoric. Assertoric propositions simply state that a predicate belongs to a subject whereas modal propositions also express the manner or mode of belonging.

The nature of the assertoric must be clearly determined before examining the various cases of modal inference. Among the examples given by Aristotle in the *Prior Analytics*, we find propositions such as "All animals are in motion" (i. 30a30), "Every man is an animal" (i. 31a15), "No intelligent thing is a crow" (i. 34b33), "No white thing is an animal" (i. 30b33), "Some man is not awake" (i. 31b40), "Some snow is not an animal" (i. 35b10). In some cases the composition or division of subject and predicate is necessary; in others, not. It should not be arbitrarily assumed with Albert the Great<sup>4</sup> that the assertoric must sometimes express a necessary connection of subject and predicate. It simply states that the predicate belongs to the subject.<sup>5</sup>

The four modes which are most commonly considered in traditional logic are necessity, impossibility, possibility, and contingency. Since impossibility is a negative necessity, its case does not differ basically from that of necessity: the impossibility of the *A* is the necessity of the *E*. There are many types of necessity: the necessity resulting from the will and power of an agent, fictional necessity and the necessity of the rules in games, the necessity of past events as past, moral necessity, the necessity of essential connection corresponding to something actually existing or at least based on hypothetical existence. The last kind of necessity is the most common in logic; it is found whenever the predicate represents something of the subject's essence or an essential property. To avoid confusion, necessity should always be given the same meaning in any one syllogism.

As for contingency and possibility, their meanings are very intimately

connected. The mode of contingency states a conjunction of possibility and negation of necessity. The difficulty of rendering the Greek words for these modes is evidenced by the variety of expressions used in the translations of the *Prior Analytics*.<sup>6</sup> Aristotle himself seems to use *endechomenon* and *dunaton* equivalently. The dictums of the possible propositions given as examples by Aristotle never show a necessary connection between subject and predicate; either the dictum states something that will be true in the majority of cases (*ut in pluribus*), or it states something which can just as well be as not be. The former kind of possibility could be called natural possibility or probability (*pephukos*); and the latter, indefinite or indifferent possibility (*aoriston*).<sup>7</sup> Thus it is naturally possible for a man's hair to turn gray with advancing age, though in some cases this does not happen. It would also be possible for an aging man not to turn gray, though this would be neither naturally nor indefinitely possible but exceptionally possible.<sup>8</sup> Dictums that could be true only through an unusual array of circumstances, even when they do not state exceptions to the laws of nature, should perhaps be termed exceptionally possible.

It should never be supposed from a purely formal standpoint that the possible is necessary, though, strictly speaking, the possible does not deny necessity but is its subaltern. If mere possibility is stated, necessity is ex-

<sup>1</sup>*Le Système d'Aristote*, (Paris: Alcan, 1920), p. 189.

<sup>2</sup>*Prior Analytics* i. 29b29-40b17.

<sup>3</sup>Theophrastus's objection to Aristotle's analysis amounts to a destruction of this section of the *Prior Analytics*. It is not only a simplification or an improvement of Aristotle's teaching, as Ross suggests. Cf. W. D. Ross, *Aristote* (Paris: Payot, 1930), pp. 55-56.

<sup>4</sup>*Opera Omnia* (Paris: Vives, 1890), Vol. 1, p. 522, col. 2 and *passim*.

<sup>5</sup>*Prior Anal.* i. 30a28; cf. Joannis Philoponi *In Aristotelis Analytica Priora Commentaria* (Berlin, 1905), p. 124, ll. 21-22: "Such is then the nature of the assertoric that it is possible for whatever is asserted of the subject not to be asserted of it."

<sup>6</sup>Tricot uses *contingent*. Tredennick ("Loeb Classical Library" translation) uses both *problematic* and *possible*. Albert the Great's Latin paraphrase resorts to *contingens*.

<sup>7</sup>See *Prior Anal.* i. 32b5-15.

<sup>8</sup>Aristotle gives as examples of possibles the possibility of a man's hair turning

gray as well as the possibility of a man's hair not turning gray (*ibid.*, 32b7 ff.), the possibility that an animal is walking or that an earthquake is happening while it is walking (*ibid.*, 32b13-14). It should be noted that propositions are termed possible or probable in two ways. Subjective possibility or probability merely reflects the imperfect state of our knowledge of a given matter; objective possibility on the other hand is founded on the objective nonrepugnance of the connection expressed by the proposition.

<sup>9</sup>Cf. *ibid.*, 32a19 ff.

<sup>10</sup>Cf. Albert the Great, *Opera*, Vol. 1, p. 526 col. 1. G. H. von Wright expresses the same idea in *An Essay in Modal Logic* (Amsterdam: North Holland Publishing Co., 1951), p. 24: "A necesse esse ad esse valet consequentia."

<sup>11</sup>*Prior Anal.* i. 29a30-29b1; Albert, *Opera*, Vol. 1, p. 467, col. 1.

<sup>12</sup>*Prior Anal.* i. 25a6-21.

<sup>13</sup>*Ibid.*, 25a26-36.

<sup>14</sup>*Ibid.*, 25a40-b2.

<sup>15</sup>*Ibid.*, 32a30-b5; cf. Hamelin, *Le Système d'Aristote*, p. 194.

cluded; the stronger mode should be affirmed if it applies.<sup>9</sup> Whereas the mode of necessity signifies both actual predication and the necessity of predication,<sup>10</sup> the mode of possibility merely indicates the possibility of predication without involving actual predication; in the case of the naturally possible, however, the predicate is known to belong to the subject *ut in pluribus*. The contingent on the other hand seems to involve not only possibility and negation of necessity but also actual predication. An identification of the contingent with Aristotle's *endechomenon* would not be consistent with his theory of the conversion of possibles.

### Reduction of Modal Syllogisms

Aristotle distinguishes between the perfect syllogisms whose conclusions follow necessarily from their premises by an evident application of the principles *dictum de omni*, *dictum de nullo*, and the syllogisms of the second and third figures which are imperfect. The latter conclude necessarily, but the logical principles are shown to apply to them by a reduction to the first figure.<sup>11</sup> In the process of reduction, the terms of an imperfect syllogism are rearranged to form a syllogism of the first figure.

Conversion is an important method of reduction. Among assertoric propositions, the *A*, *I*, *E* convert to *I*, *I* and *E* respectively; the *O* does not convert.<sup>12</sup> The necessary modal propositions convert in the same manner as the assertoric.<sup>13</sup> The *A* and *I* possibles convert to *I* possible.<sup>14</sup> Conversion of the *E* and *O* possibles is rejected on the basis of the definition given for the mode of possibility. To prove this, Aristotle introduces another kind of conversion restricted to possibles and which merely involves a change of quality in the dictum without interchange of subject and predicate.<sup>15</sup> We shall call this operation qualitative conversion to distinguish it from ordinary conversion. By qualitative conversion, *E* possible converts to *A* possible and vice versa, *I* possible to *O* possible and vice versa. Evidently *E* possible would not be true if there existed a necessary relationship between some part of the subject of *E* and its predicate. Nor would qualitative conversion of *I* be admissible if it were compatible with the corresponding necessary *A*, since that would imply the falsity of the possible *O* and prevent qualitative conversion. Thus if it is possible that some horses are white, it is also possible that some horses are not white; and if it is possible that all men are awake, it is also possible that no man is awake. The above procedures obviously apply to indefinitely possible propositions. The naturally possible *A* or *E* could not undergo qualitative conversion except perhaps to exceptionally possible *O* and *I*. The naturally possible *O* and *I*



would also convert to exceptionally possible *I* and *O*.<sup>16</sup> In any case, one should always assume, unless otherwise stated, that the possible referred to in the modal analysis is the indifferently possible. The sciences are concerned of course with the natural possible,<sup>17</sup> not with the indifferent or indefinite possible whose truth does not even exclude the truth of the opposite with which it is convertible. It remains nonetheless that the indifferent possible may be construed as formally prior to, and including within, its indefiniteness both the natural and the exceptional possible; it then becomes the possible without qualification.

If we revert to the meaning of conversion as an interchange of subject and predicate, we can show that *E* and *O* possibles are not convertible in this manner. Obviously *O* possible cannot undergo this kind of conversion, for we would be extending a term in the dictum; for example, if "some intelligent thing may not be a man," it does not follow that "some man may not be an intelligent thing." The possible *E* presents a special difficulty, since the corresponding assertoric and necessary statements are simply convertible. However, Aristotle demonstrates that it cannot be simply converted. If it is true that "possibly no *B* is *A*," simple conversion is not feasible to "possibly no *A* is *B*." For if "possibly no *B* is *A*" is true, "possibly all *B* is *A*" is also true by qualitative conversion. Assuming "possibly no *A* is *B*" to be true, then "all *A* may be *B*" is also true. But if "all *B* may be *A*," it does not follow that "all *A* may be *B*," since the *A* possible converts

<sup>16</sup>Cf. Albert, *Opera*, Vol. I, p. 539, col. 2. The complexity of this matter also calls for a distinction between the viewpoints of extension taken in its entirety and extension taken with reference to the separate individuals. Whereas it is naturally possible for a predicate to belong to a given subject because it signifies an attribute belonging to the subject in most cases, it is only exceptionally possible, in the physical order and given a sufficient number of individuals, that the attribute should belong to the entire extension of the subject. Thus the proposition that "all aging men turn gray," though naturally possible because the attribute signified by the predicate is naturally possible for each man taken separately, is only exceptionally true of the extension taken in its entirety. By stressing each inferior contained in the universal subject rather than the totality of inferiors, the naturally possible *A* and *E* could of course undergo qualitative conversion to exceptionally pos-

sible *E* and *A* (cf. *Prior Anal.* i. 32b5-18).

<sup>17</sup>Cf. *Prior Anal.* i. 32b18-23. Apparently the Aristotelian theory of the conversion of possibles (*ibid.*, 32a16-40) applies in a very restricted sense to natural possibles. Aristotle himself notes a difference between qualitative conversion of the natural possible and of the indefinite possible (*ibid.*, 32b15-18).

<sup>18</sup>*Ibid.*, 36b35-37a15.

<sup>19</sup>*Ibid.*, 29b35-30a4; cf. Hamelin, *Le Système d'Aristote*, p. 222.

<sup>20</sup>*Prior Anal.* i. 30a5-15.

<sup>21</sup>*Ibid.*, 30a15 ff.; Albert, *Opera*, I, 522; Hamelin, *Le Système d'Aristote*, pp. 202-3.

<sup>22</sup>*Prior Anal.* i. 30a15-30b7.

<sup>23</sup>*Ibid.*, 30b7-31a18.

<sup>24</sup>*Ibid.*, 31a18 ff.

<sup>25</sup>*Ibid.*, 30a15-24; also Alexander of Aphrodisias, *In Aristotelis Analytica Priora I Commentaria* (Berlin, 1883), p. 126, ll. 1 ff.



to an *I*. Yet we would have to admit this if "possibly no *B* is *A*" is simply converted by ordinary conversion.<sup>18</sup> However, it would seem that partial conversion from "possibly no *B* is *A*" to "some *A* may not be *B*" is acceptable. Thus, of the four possibles *A*, *E*, *I*, and *O*, the first three convert to *I*, *O*, and *I* respectively, whereas *O* does not convert by ordinary conversion.

Another method of reduction is the proof by contradiction or reduction to the impossible. It consists in taking the contradictory of the conclusion and coupling it with one premise to construct a modal syllogism in the first figure. The resulting conclusion should not be compatible with the omitted premise if the original syllogism is correct.

### Both Premises Necessary

When both premises are necessary, the conclusion is always necessary.<sup>19</sup> The same moods (direct and indirect) which are correct for assertoric premises are also acceptable when the premises are necessary modal propositions. "Barocco" and "bocardo" can only be reduced to the first figure by substituting for the undistributed subject a term *C* such that some *B* equals all *C*,<sup>20</sup> since the normal reduction by contradiction would yield a mixture of necessary and possible premises.

### Mixture of Necessary and Assertoric Premises

Aristotle and many others after him teach that if one premise is assertoric and the other necessary, a necessary conclusion sometimes follows.<sup>21</sup> He states that the conclusion in the first figure will be necessary if the major is necessary, whether the syllogism is universal or particular.<sup>22</sup> In the second figure, the conclusion will be necessary only if the universal negative is necessary, for such syllogisms are reducible to those of the first figure which have a necessary conclusion.<sup>23</sup> Finally Aristotle writes that syllogisms of the third figure will have a necessary conclusion if, in affirmative syllogisms, the universal affirmative is necessary and, in negative syllogisms, the universal negative is necessary.<sup>24</sup>

The syllogisms of the second and third figures are proved by reduction to the first; hence it suffices to consider the moods of the first figure to determine whether a necessary modal conclusion can ever be drawn from a mixture of assertoric and necessary premises. According to Aristotle, if the major in one of the four direct moods is a necessary modal, the conclusion will also be a necessary modal. He reasons that the major term (for instance, in "barbara") belongs necessarily to the minor term since the major term belongs necessarily to the middle term and the minor term is but a part of the extension of the middle term.<sup>25</sup> Indeed, it would be quite

difficult to defend this portion of Aristotle's teachings. It does not seem that a mixture of assertoric and necessary premises can ever produce a necessary conclusion. Because *A* belongs necessarily to all *B* and *B* belongs simply to *C*, it does not follow that *A* must belong to *C*. Thus if "all lawyers must have passed the bar examination" and "all the councilmen of a given town are lawyers," it follows simply that "all the councilmen of the town have passed the bar examination." As in the example, the terms can be such that the connection between *A* and *B* is necessary while the connection between *B* and *C* is actual though not necessary.<sup>26</sup> Then it appears that a necessary conclusion cannot be drawn. It could be said in defense of Aristotle that *A* necessarily belongs in reality to the things signified by *C*, insofar as *A* is necessarily identified with *B* of which *C* is a logical part. But whereas necessity governs the relationship between *B* and *A*, no necessity can be inferred for the relationship between *C* (considered as *C*, not just as some *B*) and *A*. In the example given above, there is no necessity that councilmen as such have passed the bar examination.

Aristotle's doctrine is at the origin of a lively controversy in Greek philosophy. According to Ammonius,<sup>27</sup> the Platonists as well as Theophrastos and Eudemos refuse to admit that a necessary conclusion follows from a mixture of necessary and assertoric premises; but the commentator points out that, among more recent thinkers, Alexander and Iamblichos side with Aristotle, while Themistius, Surianos, and Proclus oppose him. Thus

<sup>26</sup>John Philoponos states the same objection in his commentary on the *Prior Analytics*, p. 124, ll. 24-28. It is suggested that Aristotle's rule does not hold for terms such as "motion," "walking," "man" or "virtue," "prudence," "man."

<sup>27</sup>Ammonius, *In Aristotelis Analyticorum Priorum I Commentarium* (*Commentaria in Aristotelem Graeca*, Vol. 4, Part 6 [Berlin, 1899]), p. 38, ll. 38 ff.; see also Alexander, *In Arist. Comment.*, p. 124, ll. 8 ff.

<sup>28</sup>Cf. Alexander, *In Arist. Comment.*, p. 124, ll. 8-17; also John Philoponos, *In Arist. Comment.*, p. 126, ll. 2 ff.

<sup>29</sup>Cf. Ammonius, *In Arist. Comment.*, p. 40, ll. 5-7.

<sup>30</sup>Albert the Great, *Opera*, I, 523.

<sup>31</sup>*Prior Anal.* i. 30a28.

<sup>32</sup>Some ancient Greek interpreters attempt to justify Aristotle's theory on the ground that it holds only for those assertories whose subject and predicate are necessarily related (cf. Alexander, *In Arist. Comment.*, p. 125). Alexander dis-

misses this interpretation as ridiculous and empty. Ammonius identifies a certain Herminos as proposing such a solution (*In Arist. Comment.*, p. 39, ll. 31-32). Such explanations completely overlook the formal viewpoint adopted by Aristotle in his exposition of the rules of inference. Iamblichos, according to Ammonius (p. 40), distinguishes between the assertoric that inclines to the necessary and that which inclines to the possible; the first type would combine with a necessary modal to produce a necessary modal conclusion.

<sup>33</sup>This doctrine was attributed to Aristotle from the earliest times. There is evidence that the chapters in which it is expounded (chaps. 8-22) were hastily written (cf. 35a2). Lukasiewicz looks upon this part of the *Analytics* as a later insertion (*Aristotle's Syllogistic* [Oxford: Clarendon Press, 1951] p. 131, n. 1). It seems more likely to have been an earlier experimental piece of work than the product of a more mature consideration.

Aristotle's doctrine does not appear to have met with the approval of his contemporaries and immediate successors, though later it did gain the acceptance of some commentators.

The opponents point out that the assertoric is "inferior" to the necessary; hence to draw a necessary conclusion from a mixture of assertoric and necessary premises constitutes a violation of the principle that *pejorem semper sequitur conclusio partem*.<sup>28</sup> They find it significant that Aristotle fails to demonstrate by means of terms the cases in which he draws a necessary conclusion from a mixture of premises.<sup>29</sup>

Albert the Great, presumably not wishing to contradict Aristotle's authority yet sensing the fallacy, holds that the assertoric referred to is one in which the connection between subject and predicate is necessary (*C substantialiter est sub B*).<sup>30</sup> This interpretation supposes that Aristotle gives radically different meanings to the same words in the same context but without indicating the shift in meaning. However, Aristotle's own text contradicts Albert's interpretation; the text<sup>31</sup> describes an assertoric as a proposition in which *A* belongs to *B* but could very well not belong to it. This does not eliminate necessary predication in the assertoric form but distinguishes the simple assertoric statement of such a predication from its modal expression inasmuch as the assertoric considered as such does not exclude, in a purely formal sense, the possibility of its opposite. In considering the case of mixed necessary and assertoric premises which is recognized not to yield a necessary conclusion, Albert takes a view of the assertoric which is opposed to his first interpretation and conforms to Aristotle's definition; then, he states, if the conclusion is necessary, it is not *virtute syllogistica* but *gratia materiae*. An application of the same principle to the first case would show that here too a necessary conclusion can result only *gratia materiae*, not *virtute syllogistica*. If "all animals must be organic" and "all white things are animals," it follows that "all white things are organic," not that "all white things must be organic." Some will contend that "white things" is a part of the extension of "animal" and may be the subject of a proposition in which "organic" is predicated with necessity. But if "white things" is simply the particular of "animal," it seems that syllogistic progress is destroyed; "white" is a term in its own right, not simply "some animal," nor should it be considered such in the conclusion which is not a mere reformulation of the major premise but a new truth. It follows that the teaching of the *Prior Analytics* is at fault on this point.<sup>32</sup> Since the examination of syllogisms with mixed assertoric and necessary premises sets the tone for much of Aristotle's later developments, the entire modal analysis appears inadequate and, in many respects, even facetious.<sup>33</sup>

## Syllogisms with Possible Premises

If the premises are natural possibles, the conclusion will also be a natural possible.<sup>34</sup> But if the possibles are indefinite possibles, no conclusion can be drawn, since two indefinite possibles may express a logical potency for opposites; that is, two incompatible terms may be coupled with the same middle term in possible premises. It does not follow from "all men may be black" and "all white things may be men," that "possibly all white things are black." The possible states the consistency of a connection between subject and predicate, irrespective of the truth or falsity of the connection; it cannot be made to signify the consistency of a dictum in which opposites are identified.

Syllogisms in which the indefinite and natural possibles are mixed lead to a conclusion provided the corresponding assertoric mood is correct and provided the indefinite possible is not equivalent to the modal converse of the natural possible (for example, no conclusion could be drawn from the propositions that "it is naturally possible that aging men turn gray" and "it is possible that aging men retain their dark hair"). As for syllogisms in which there is a mixture of assertoric and indefinite possible, it would seem that no conclusion can follow with logical necessity, since the assertoric (for instance, "The buying power of the dollar is increasing") could always state something which, in terms of possibility and without reference to actual existence, would be indefinitely possible; hence the objection to syllogisms with two indefinitely possible premises extends to the mixture of assertoric and indefinitely possible premises. If the syllogism has one assertoric and one naturally possible premise, a conclusion could be drawn as in the case of the mixture of indefinitely possible and naturally possible premises; but it could be no more than indefinitely possible unless the assertoric happens to state a necessary connection between subject and predicate. From a strictly formal viewpoint, however, not one of the mixtures considered in this paragraph would necessarily yield a conclusion; it is always possible to conceive of terms for which no conclusion can be inferred.

### Mixture of Necessary and Possible Premises

A mixture of necessary and naturally possible premises leads to a naturally possible conclusion for all the correct moods. But special cases arise with a mixture of necessary and indefinitely possible premises. Because of qualitative conversion of the indefinitely possible premise, it is possible

<sup>34</sup>For example, all who turn gray may suffer from an X deficiency. But all aging men may turn gray. Therefore all aging men may suffer from an X deficiency.



to draw conclusions with moods that would not be correct with assertoric premises. For example, the mood having a necessary *E* as major and a possible *A* as minor is equivalent to the mood having a necessary *E* major and a possible *E* minor (for instance, "No lawyer can be ignorant of the law. But it is possible that all the trustees are lawyers," or by qualitative conversion, "It is possible that no trustee is a lawyer. Therefore it is possible that no trustee is ignorant of the law"); thus mood *EE* would lead to a conclusion with this mixture of modal premises because it is reduced to *EA* by qualitative conversion. Modal analysis would show that, whenever a conclusion follows from two assertoric premises, a conclusion will also follow from a mixture of necessary and indefinitely possible premises, and the conclusion will always be indefinitely possible. However, even in the moods which cannot conclude either directly or indirectly with two assertoric premises, there may still be a conclusion if one premise is an indefinitely possible proposition, since indefinitely possible propositions are convertible into their opposites; for example, "It is possible that no *A* is *B*" converts to "It is possible that all *A* is *B*." In this manner, besides the correct moods for assertorics, other moods conclude either directly or indirectly by conversion of the indefinitely possible premise (for instance, *EE* and *OE* in all figures). In syllogisms where the usual reduction to the first figure is not feasible owing to the impossibility of ordinary conversion of the *E* and *O* possibles, the moods can be proved by contradiction. All such cases, though perhaps theoretically interesting, have no practical significance.

### Modal Syllogisms Having Contingent Premises

If the premises are both contingent in the sense defined above, the conclusion in all the correct moods will be contingent. A mixture of necessary and contingent premises yields a contingent conclusion. The conclusion drawn from a mixture of assertoric and contingent premises can be stated indifferently as an assertoric or as a contingent proposition. A contingent premise coupled with a possible premise will not necessarily lead to a conclusion, since the contingent may state a fact inconsistent with the dictum of the possible premise. What was said previously about the mixture of assertoric and possible premises also applies to the present case.

### Conclusion

Much of Aristotle's modal analysis is not very useful to the advancement of knowledge. Lukasiewicz looks upon it as "an extension of logic, but

probably not in the right direction."<sup>35</sup> The mind does not make significant progress in its search for truth by formulating a possible composition of subject and predicate which implies at the same time a possible division of the terms.<sup>36</sup> If on the other hand the connection is necessary or even naturally possible, the mode would normally be omitted in reasoning and the proposition would be stated in the form of an assertoric.<sup>37</sup> It is, however, important for completing the theory of logical inference to work out the implications of modal premises or of mixtures of modal and assertoric premises.

This article has attempted to indicate a number of elements which are essential to any analysis of modal reasoning. The modes should be carefully defined and the nature of the assertoric determined. The theory of the figures and moods of correct reasoning from assertoric premises is presupposed, though it remains open to certain modifications resulting from the modal conversion of possible premises. The principle of *pejorem semper sequitur conclusio partem* would also seem to have some application to modal reasoning. Thus necessity is the strongest mode. Natural possibility is stronger than indefinite possibility, but a conclusion can only be drawn from the mixture of natural and indefinite possibles by an interpretation of the matter (*gratia materiae*). The same holds true for the mixture of natural possible and assertoric or contingent premises. From the purely formal standpoint, the assertoric and the contingent are of equal strength, despite the fact that the contingent excludes necessity. The indefinite possible (as including the exceptionally possible) is weaker than both the assertoric and the contingent, but no conclusion would follow in a strictly formal sense from such mixtures.

In conclusion, it appears that Theophrastus was right in requiring that the principle *pejorem semper sequitur conclusio partem* be applied to the modes as well as to the quantity and quality of propositions. However, it is clearly not sufficient to solve all the problems which confront the mind in modal reasoning. As we have suggested, other factors must be considered in determining the correctness of modal inferences.

<sup>35</sup>Aristotle's *Syllogistic*, p. 131.

<sup>36</sup>Although Aristotle acknowledges the feasibility of a syllogism having indefinitely possible premises, he discounts the importance of such propositions (*Prior Anal.* i. 32b18-23). However, to explain the correctness of syllogisms having a mixture of assertoric and naturally possible

premises, it is necessary, as we have indicated above, to understand the syllogisms with indefinitely possible premises.

<sup>37</sup>Cf. G. Grote's sweeping condemnation of the section of Aristotle's *Prior Analytics* dealing with the modal syllogisms (*Aristotle* [London: John Murray, 1872] pp. 294 and 297).

## WANTED: More Subjectivity in Truth

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Students of our American Catholic schools are told repeatedly of the objectivity of truth. They realize that you cannot pick and choose what you wish to be true. There is danger, however, that a one-sided emphasis on the objectivity of truth fails to point up the equally necessary subjectivity of truth. This subjectivity of truth is a neglected stepchild in the family of Catholic education. That such is the case may partially be seen in the following episode.

A somewhat agitated student recently approached a professor of philosophy at a Catholic college, impatiently complaining, "Why do we waste so much time trying to understand these other, non-Catholic philosophers? When are you going to give us the Catholic position?" Since the professor was interested in having his students make the effort to see a properly philosophical *problem*, his answer to the latter question was a curt "Never."

Now, admittedly, this is only a single instance of an intellectual abdication by a Catholic student. However, it points to a situation within the Catholic educational system which is receiving the attention of increasing numbers of cautious and competent critics. I refer to the rising tide of self-evaluation and criticism of our Catholic schools in terms of their apparent inability to train proportionately enough intellectual leaders, whether in the areas of the sciences, letters, or the humanities. This criticism embraces the entire system of Catholic education, since intellectual habits are begun as early as the primary grades.

These critics pay genuine tribute to those numerous pioneers, both lay and clerical, who sacrificed so much in their indefatigable efforts to found and foster this magnificent system of American Catholic schools. Tribute is paid also to those of our own day whose daily lives of sacrifice are a necessary factor structuring this system. For the most part, they are aware of the historical circumstances surrounding the origin and growth of our schools and their primarily religious role of conserving and nourishing the faith. But, they ask, do not our schools have the additional role of preparing our youth for intellectual leadership? Have we not, perhaps, overstressed the school as an agency for moral development at the expense of an insufficient emphasis on the fostering of intellectual excellence? Given this additional role, how well are the schools fulfilling it?

Their answers are far from encouraging. Recent studies reveal the startlingly low proportion of Catholic research scientists.<sup>1</sup> Julian Pleasants, one of these, seems to think our admitted shortcomings are not due solely to



problems of school finance.<sup>2</sup> Our philosophical and theological journals reveal a scarcity of topflight American philosophers and theologians. Other critics point out that most of the Catholic authors who have commanded literary respect in this country are either not Americans or received their education in non-Catholic institutions.<sup>3</sup>

Nearly all these critics point to a tendency on the part of some Catholics to overemphasize the supernatural and other-worldly aspects of the Christian religion. This results in many taking the view that because a Christian is a pilgrim to eternity, he is a stranger in this temporal world of ours. An intellectual sloth or lack of concern for things purely intellectual or scientific consistently follows this view. Father John Tracy Ellis, historian of Church history, sums up most of this criticism in his forthright and charitable evaluation of American Catholics and the intellectual life.<sup>4</sup>

If much of this criticism is valid, then there is a definite problem facing

<sup>2</sup>Cf. R. H. Knapp and H. B. Goodrich, *Origins of American Scientists* (Chicago, 1952).

<sup>3</sup>"Catholics and Science," *Catholicism in America*, A Series of Articles from the *Commonweal* (New York, 1954), pp. 165-79.

<sup>4</sup>Cf. Dan Herr, "Reading and Writing," *Catholicism in America*, p. 194. For the extensive contributions made by converts, see David Martin, c.s.c., *American Catholic Convert Authors. A Bio-Bibliography* (Detroit, 1944). For a more optimistic appraisal of the Catholic cultural contribution to the United States, see the survey made by Theodore Maynard in his *The Story of American Catholicism* (New York, 1941), pp. 543-86.

"American Catholics and the Intellectual Life," *Thought*, xxx (autumn, 1955), 351-88.

<sup>5</sup>"The Child Centered School—Dogma or Heresy?" *Proceedings of the American Catholic Philosophical Association*, xxix (1955), 263-74. For John Dewey and the "progressives," truth loses all speculative meaning and is concerned solely with action. In other words, truth is now an adjustment to what is to be done, and knowing becomes a knowing *how*. All the philosophical controversies on this point arise, Dewey tells us, "from the assumption that the true and valid object of knowledge is that which has being prior to and independent of the operations of

knowing. . . . If we see that knowing is not the act of an outside spectator but of a participator inside the natural and social scene, then the true object of knowledge resides in the consequences of directed action. . . . On this basis the result of one operation will be as good and true an object of knowledge as is any other, provided it is good at all: provided, that is, it satisfies the conditions which induced the inquiry" (*The Quest for Certainty. A Study of the Relation of Knowledge and Action*, "The Gifford Lectures," 1929 [New York, 1929], pp. 196-97). And since no two problems are ever exactly the same, no two knowledges and their consequences will ever be the same; and any notion of an eternally true, immutable knowledge, valid for all in every circumstance, becomes a chimera.

<sup>6</sup>See Plato, *Cratylus*, 440, for a summary statement of the problem.

<sup>7</sup>Consider the path to skepticism followed by later Academicians, Arcesilaus and Carneades.

<sup>8</sup>In their wholesome revolt against the static, unchanging world of essences of the rationalists and the idealists, the pragmatists and the naturalists have insisted on the dynamic, changing character of reality. However, they have been unable to overcome their aversion to the supposed rigidity and lifelessness of a properly intelligible reality and its petrification in abstractions.



Catholic educators. To be sure, the solution to the problem will be many-sided. Interested theologians, psychologists, educators, teachers, historians, and parents all will have something of importance to say. I should like to explore, solely from a philosophical point of view, the possible connection between this failure to produce a proportional number of intellectual leaders and a failure to emphasize an essentially subjective characteristic of truth; namely, that we are the makers of our own truths.

Note that we are not forced to choose between a completely objective and a purely subjective truth. There are ample reasons for those supporting truth's objectivity to be sensitive to those claims for its subjectivity which would deny truth any objective validity. Thus, Francis C. Wade, s.j., would suggest a "reality-centered" theory of education as opposed to the progressive "child-centered" one because of the latter's tendency to stress *methods* of thinking at the expense of *what* is thought. Such a tendency leads to a lessening, if not outright denial, of objective truth.<sup>5</sup> However, since true knowledge can be considered as subjective in different ways, there are some rather serious consequences of overstressing its objectivity and overlooking its subjectivity which affect the problem under discussion.

Certainly, I do not wish to imply in any way that Catholic educators are unaware of these subjective characteristics of truth. What I do say is that many students, hearing from their teachers a constant stressing of truth's objective validity, fail to see their own necessarily subjective relationship to true knowledge. It is this failure, I think, that ought to be related to our deficiencies in the matter of intellectual leadership.

Let us set aside, first of all, that illegitimate subjectivism which would claim that each thing is only as it appears to *me*. My true knowledge, then, is unique, enclosed within my limited view of reality, incommunicable, and valid for no one else. In this view, reality is in a state of constant flux, never "standing still" long enough to truly *be*. Knowledge is the fleeting, instantaneous relation of a changing knower to an ever-changing reality. How could such a knowledge, never abiding and enclosed within that unique perception, be valid for another?<sup>6</sup> Historically, when such a view of sensible reality is not complemented by an other-worldly view of a stable, intelligible reality, skepticism is the result.<sup>7</sup> Many modern thinkers, sharing this view of sensible reality as radically unintelligible, restrict their skepticism to moral values, inconsistently maintaining a faith in scientific certitude.<sup>8</sup>

A realist philosopher would recognize, however, that the knowability—in fact, the very existence—of anything is due to its being known by the creative knowledge of God. That is to say, each thing is, and is the way that it is, because God creatively knows it to be, and to be in that way.

This same creative knowledge endows all human knowers with the additional power to grasp what is humanly knowable about reality. While this represents only a small part of what there is to know, still it is this power which constitutes man in the image and likeness of his Creator.<sup>9</sup> Given this knowability of reality and our power to know it, our knowledge is true when our judgment about the way reality is vitally conforms to that objective reality. True knowledge, then, is radically objective. It is always of an object and determined by that object.

But, granting this objectivity, is there nothing subjective about our true knowledge? Consider the distinction between the spheres of human knowledge and human action. To know something is not to do or make anything, nor is doing and making something knowing. Yet these two spheres are not separated in existence. It is the same man who does or makes something on the basis of what he knows. Now, certainly, Christian upholders of truth's objectivity would urge a more subjective Christianity, if subjectivity meant the lived, personal realization of the Christian truths objectively known.

This is the subjectivity of truth to which that great nineteenth-century religious thinker, Søren Kierkegaard, dedicated his prodigious literary life. Faced with an age that was officially "Christian" but was in reality far removed from the teachings of Christ, Kierkegaard vehemently insisted that truth is essentially subjective. Even preaching the truths of Christianity every Sunday and believing in them does not make a true Christian. As he said, ". . . Christianly understood, the truth consists not in knowing the truth, but in *being* the truth"<sup>10</sup> and "Christ is the truth in such a sense that to *be* the truth is the only true explanation of what truth is."<sup>11</sup>

M. Maritain has this aspect of the subjectivity of truth in mind when, in classifying atheists, he notes *practical atheists*. These are man "who

<sup>9</sup>Consider, then, the inconsistency of any Catholic "anti-intellectualism." For one discussion of the historically close connection of Christianity and intellectual endeavor, see E. Gilson, *Christianity and Philosophy* (New York, 1939).

<sup>10</sup>*Training in Christianity*, Part III, v, trans. Walter Lowrie (Oxford Univ. Press, 1941), p. 201.

<sup>11</sup>*Ibid.*, p. 200.

<sup>12</sup>*The Range of Reason* (New York, 1952), p. 97.

<sup>13</sup>Cf. Lance Wright, "The Apostolic Role of the University Graduate," *Downside Review*, (winter, 1953), pp. 50-51. See also Joseph Breig, "Preparing Youth

for Intellectual Leadership," *America*, xciii (September 3, 1955), 530-35.

<sup>14</sup>The increasing number of remedial religion classes in Catholic colleges for graduates of Catholic schools has caused many educators to make an agonizing reappraisal of current methods of teaching religion. Sister Mary Imeldis Lawler in *An Evaluation of Instructional Methods in Religion* (Catholic Univ. Press, 1947), p. 74, concluded that the all too common endless rote of questions and answers should be replaced with more vital assignments.

<sup>15</sup>"Sight, Sound and the Fury," *Commonweal*, lx (April 9, 1954), 7-11.

believe that they believe in God (and who perhaps believe in Him in their brains) but who in reality deny His existence by each one of their deeds. Out of the living God they have made an idol."<sup>12</sup> They exemplify, for Maritain, the disagreement or cleavage possible between the intellect and the will, between knowledge and actual behavior. Thus, one legitimate meaning of the subjectivity of truth would be that I consider my true knowledge as true *for me* and act accordingly.

There is another kind of subjectivity in true knowledge, however, which is more to our point. This is the subjectivity implied in saying that we make our own truth. Yes, *we* make our own truth. It is this factor in human knowing that is often overlooked in stressing its objectivity. Note, I do not say that we can make true what is untrue or vice versa. But I do say that unless *we* place ourselves, within knowledge, in a relationship of conformity with objective reality, then *we* do not have true knowledge.

At this point, distinguish between a true knowledge and knowledge of a truth. It is very easy, often too easy, to acquire knowledge of a truth. True knowledge, however, is not easy to acquire. Its acquisition is often most difficult and might represent the achievement of a lifetime's diligent searching. Why is it, then, that we can note certain current trends to make the acquisition of truth appear less arduous and more pleasant? We are living in an age of condensed literary classics and even condensed musical treasures. We have scores of books claiming to make this and that subject easy. Perhaps this is merely a state of mind reflecting the progress our age has made in the development of labor-saving devices.

However, in the case of the Catholic students, one might wonder if there is any connection between their being taught the magnificent truths of revelation by rote and their attitude toward the acquisition of other kinds of truth.<sup>13</sup> It is assumed, apparently, that they acquire some understanding of their faith with no effort other than mechanical drill and memory.<sup>14</sup> Why cannot this work also in learning other truths? Perhaps this explains why a so-called "Scholastic philosophy," as taught in manuals that ape the very rationalistic *more geometrico* they condemn, has failed in spectacular fashion to have any vital influence on contemporary philosophical dialogues.

The sad fact is that many students tend to think of truth as some *thing* which can be disclosed in textbook formulas. If this is the case, why not just memorize, why not just learn the answers, why not just acquire the jargon of truth without its comprehension? Professor McLuhan, student of contemporary communication media, describing our present-day conception of culture as excessively bookish, points up the undue reliance we have placed on the written word, making of books almost a substitute for reality.<sup>15</sup> Plato has Socrates criticize the inventor of writing in these words:



It is no true wisdom that you offer your disciples, but only its semblance; for by telling them of many things without teaching them, you will make them seem to know much, while for the most part they know nothing.<sup>16</sup>

This is not to criticize books as a medium for communicating truth but to criticize the failure to realize the essentially active, and thus objective, role of the learner in that communication.

Philosophers throughout the ages have seen this active role of the student in relation to his teacher. Some—as, for example, Socrates, Plato, and St. Augustine—would stress this essentially active side of learning, reducing the human teacher to an occasion for the student to grasp some truth. Socrates would refer to himself as a midwife, assisting at the birth of truth in one of his students. Knowing becomes a reminiscence, an uncovering by the student of what is already present, in a veiled way, to his understanding. Others, as St. Thomas, would insist on the equally active, equally necessary role played by the teacher in the learning process. It is the teacher, patiently re-creating his own true knowledge in an orderly fashion, who causes the student to reproduce this order in his own knowledge and thus acquire the taught knowledge.<sup>17</sup>

All of these philosophers, however, would reject the notion of a teacher placing ready-made truths in the minds of his pupils. As St. Thomas explained:

When they say that a teacher transfuses his learning to his pupil, this does not mean that the learning that is in the master is to be found afterward, numerically the same, in the pupil; it means that a learning similar to that of the master is caused in the pupil by the fact of his being taught.<sup>18</sup>

In his penetrating lecture, "The Eminence of Teaching," Etienne Gilson noted:

There is no use in displaying evidence before eyes that make no effort to see it; when they do see it, the reason is not that we made it so

<sup>16</sup>*Phaedrus* 275B, trans. R. Hackforth (Cambridge, 1952), p. 157. Cf. *Epistle vii*, 340B-344D.

<sup>17</sup>Cf. *De Veritate*, q. 11, a. 1; *Summa Theologiae* I, q. 84, a. 3 ad 3; *Summa contra Gentiles* II, cap. 75.

<sup>18</sup>*De Veritate*, q. 11, a. 1 ad 6, trans. Etienne Gilson in "The Eminence of Teaching," *Disputed Questions in Education* I, (New York: Doubleday, 1954).

<sup>19</sup>*Disputed Questions in Education* I, p. 24.

<sup>20</sup>*Ibid.*, pp. 27-28. Discussing the emphasis in educational theory on properly motivating the students, Sister Mary Aloise, S.N.D., "Testing for Sugar on the Slate," *Catholic Educational Review*, LI (March, 1953), 145-51, warns of the anti-intellectualism that results from a failure to teach the students to "motivate" themselves.

<sup>21</sup>*Training in Christianity*, pp. 198-99.



clear that we understood it for our pupils; sooner or later they have to understand it by themselves, and their own effort to understand it is for them the only way there is to learn it. The most scientifically pedagogical methods are bound to fail if they go against the facts of nature. In this case, the fundamental fact of nature is that no man can understand anything for another one. No master can take his own knowledge out of his mind and put it in the head of his pupils. The only thing he can do is to help them to put it themselves into their own minds.<sup>19</sup>

Thus he can conclude, "This is the true reason why the ultimate end of our pedagogy should be to teach children to learn by themselves, because, in fact, there is nothing else we can teach."<sup>20</sup>

This is the subjectivity in truth which should be pointed out and emphasized for the Catholic student if we are to develop any vigorous Catholic intellectual movement. True knowledge is hard to come by in that sense. We tend to think that once someone has succeeded in wresting some truth for himself, he has merely to speak or write that truth for all of us to have a similar true knowledge. Fortunately, or unfortunately, this is not the case with human knowledge. If *we* are to have any true knowledge, then *we* have to make that subjective effort. Kierkegaard asked:

Is 'truth' the sort of thing one might conceivably appropriate without more ado by means of another man? Without more ado—that is, without being willing to be developed and tried, to fight and to suffer, just as he did who acquired the truth for himself? Is not that as impossible as to sleep or dream oneself into the truth? Is it not just as impossible to appropriate it thus without more ado however wide awake one may be? Or is one really wide awake, is not this a vain conceit, when one does not understand, or will not understand that with respect to the truth there is no short cut which dispenses with the necessity of acquiring it . . . ?<sup>21</sup>

The implications for Catholic teachers are clear. Students must see the necessarily subjective requirements for achieving true knowledge and the special pertinence of this achievement to our own day. Rather than maintain a ghetto-like hoarding of the tremendous intellectual treasures of our Catholic heritage, they should realize the immense work to be done disseminating old truths and integrating new ones. Such was the glory of St. Thomas; such is the vocation of every Catholic intellectual. In this light, consider the added responsibility of the Catholic teacher. As Dr. Pegis concluded:

Let it be granted that man is a noble creature, but one who matures

by a physical and spiritual aging and whose growth is subject to winds of error and uncertainty. What a frail thing man is in his very nobility! Here, surely, is the burden of our vocation as teachers. We must teach the truth faithfully, yet we must teach with an enormous anxiety for those who are to receive our teaching. And if our teaching embraces the world in which man lives, because it embraces him, then our concern must be that men understand our teaching, that they share in the truth, *that they possess it in their own name, and that they live and grow in it*. Our teaching is not aimed at eternity, since eternity does not need to be taught, but at time, at the noble and frail humanity of man which needs truth in order to be human *and which must constantly renew its life in the truth in order to remain human*.<sup>22</sup>

And if we emphasize also that other subjectivity in truth which is proper to the sphere of human action—namely, that true knowledge is true *for* its possessor—then the sanctifying power of truth can be revealed as leading the doer of truth to Truth Himself. It is perhaps fitting to close with a quotation from a son of St. Dominic, Father A.-D. Sertillanges, whose already classic *The Intellectual Life* has inspired many to an ardent desire for that vocation. As he said:

By practicing the truth that we know, we merit the truth that we do not yet know. We merit it in the sight of God; we merit it also with a merit which brings its own reward; for all truths are linked together, and homage in act being the most decisive of all, when we pay that homage by living the truth of life, we draw near to the supreme light and to all that flows from it.<sup>23</sup>

<sup>22</sup>"Catholic Education and American Society," *Disputed Questions in Education I*, p. 14. Italics mine.

<sup>23</sup>*The Intellectual Life* (Westminster, Maryland, 1952), p. 23.

## BOOK REVIEWS

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*Introductory Metaphysics.* By Avery R. Dulles, s.J., James M. Damske, s.J., and Robert J. O'Connell, s.J. New York: Sheed and Ward, 1955. Pp. ix + 345. \$4.50.

*An Introduction to the Science of Metaphysics.* By Henry J. Koren, c.s.sp. Saint Louis: B. Herder Book Co., 1955. Pp. xix + 291. \$4.50.

*Introduction to the Philosophy of Being.* By George P. Klubertanz, s.J. New York: Appleton-Century-Crofts, 1955. Pp. xiii + 300. \$3.00.

*The Philosophy of Being.* By Louis De Raeymaeker. Trans. Edmund H. Ziegelmeyer, s.J. Saint Louis: B. Herder Book Co., 1954. Pp. xii + 360. \$4.95.

*The Structure of Metaphysics.* By Morris Lazerowitz. New York: Humanities Press, 1955. Pp. xiii + 280. \$5.00.

Metaphysics is a hazardous profession. The danger arises to a large extent from the extreme difficulty of being clearly and consistently aware of the distinctions between the peculiarities of our human way of knowing and the contents of our knowledge which have ontological value. Even the smallest confusion in this area can be disastrous to metaphysics as a science of real being. The metaphysics texts under review grapple with these problems with varying degrees of success.

The sub-title of *Introductory Metaphysics* by Fathers Dulles, Damske, and O'Connell indicates that it is "A Course Combining Matter Treated in Ontology, Cosmology, and Natural Theology." This intention of the authors is defended by a theory of the division of the philosophical sciences presented in the general introduction. Philosophy has three main parts: metaphysics, which studies objects existing independently of our knowledge; epistemology, which studies human knowledge; and ethics, which studies human conduct. It should be noted that this division is based on a distinction of the *objects of knowledge* rather than the more fundamental distinction of the *modes of human cognition*. If the position of the authors be taken as the adequate basis for the division of philosophical sciences, at least two serious objections can be raised. Firstly, it is impossible to have two distinct philosophical cognitions of the same real being; for example, distinct metaphysical and cosmological knowledge of material being. Secondly, the natural sciences (physics, chemistry, and so on), which also purport to study real objects, must either be parts of metaphysics or else

they deal with nonreal objects. These difficulties are avoided only by a division of sciences which includes a distinction of the various intellectual operations in the knower.

Metaphysics itself is divided in the Wolffian tradition into general metaphysics (ontology) and special metaphysics (natural theology, rational psychology, and cosmology). The inclusion of rational psychology and cosmology in metaphysics follows from the division of philosophical sciences mentioned above. This implies that all philosophical cognition of extramental being is metaphysical knowledge. What has happened to the philosophy of nature?

The text itself is clearly written and pedagogically well organized. The subject matter is divided into twenty-nine questions. Each chapter or question includes a statement of the problem, historical opinions, analysis and summary, supplementary notes, and suggested reading. The fundamental method used in the text is the argument from observed activities to nature and being (*agere sequitur esse*). The skillful use of this method, coupled with well-chosen inductive examples, results in an unusually clear treatment of change, multiplicity, and the principles of finite being. The principle of efficient causality is introduced as an application of the principle of sufficient reason to contingent beings. In a supplementary note Hume's arguments against the objective validity of causality are answered by an analysis of the sensio-intellectual nature of human experience of changing being. At this point the way is cleared for a discussion of the existence, nature, and activities of God, which forms the second half of the text.

Father Koren approaches his subject matter through the distinction of the three degrees of abstraction. The first degree of abstraction constitutes that level of knowledge which is physical or natural science (physics, chemistry, biology, etc.); the second degree establishes mathematics; and the third degree, metaphysics. Metaphysics includes general metaphysics (study of the concept of being) and special metaphysics (theodicy, cosmology, psychology, and philosophical anthropology). This division of sciences is open to serious objections, some of which are mentioned above in regard to the text by Fathers Dulles, Demske, and O'Connell.

Since general metaphysics is the study of the concept of being, metaphysical method is primarily an analysis of concepts. The concept of being is ontologically the first of all concepts. Its analysis reveals the principles of noncontradiction, sufficient reason, efficient causality, final causality, and even the delineation of the ten categories. The author does not make use of an inductive appeal to our experience of sensible being to establish the



ontological validity of these principles. The situation becomes especially acute when the question is raised as to whether the *concept* of cause corresponds to objective reality. Father Koren claims that it does, for otherwise there could be no sufficient reason for the real distinction of essence and existence in finite beings. But this appeal to sufficient reason is merely an argument within the framework of the analysis-of-concepts method and hence does not adequately overcome the Humean objections against the ontological validity of causality. This difficulty concerning efficient causality and other similar problems in this book force us to re-examine the metaphysical value of the method of conceptual analysis. If it is true that metaphysics studies the concept of being, then the analysis of concepts is the proper method of metaphysics. But, if metaphysics studies the concept of being, then in what sense is it a science of the real? It is precisely here that the main problem lies. Is the object of metaphysics the concept of being or actually existing, extra-mental being? The option that one takes at this initial point determines both the proper method of metaphysics and also the very meaning of metaphysical principles and their consequences.

Father Klubertanz's *Introduction to the Philosophy of Being* is based on the conviction that the material beings of our immediate experience are ontologically intelligible to the human mind. This does not mean that we know such beings exhaustively. Rather it means that finite material beings are neither entirely contingent nor entirely material and hence can be the object of necessary, intellectual judgments. This fundamental Aristotelian-Thomistic position determines both the point of departure and the methodology of the philosophy of being.

Metaphysics begins with the data of our immediate experience of material being as expressed in perceptual judgments. Such judgments implicitly contain the common intelligibility of being, or that which is. Metaphysics is formally constituted by a further negative judgment which separates the intelligibility of what it means to be from the intelligibility of material quiddity. Father Klubertanz's emphasis here on the role of judgmental knowledge enables him to avoid the pitfalls of metaphysical subjectivism.

The method of metaphysics is neither an analysis of concepts nor a deductive application of the principles of noncontradiction and sufficient reason. Rather, metaphysics develops primarily through the process of intellective induction by which the mind uncovers a series of ontological intelligibilities in real existents. This method is especially noticeable and valuable in the discussion of efficient and final causality. Extrinsic causality enters metaphysics as a result of our direct experience of efficiency and finality in real being. Hume's objections rightly attack the position that

causality is applied to real being rather than derived from it.

Father Klubertanz's presentation of metaphysics includes several other valuable points. First is his careful distinction between predicamental being and real being. The predicaments are being as known. Within each predicament we must distinguish *what* is known (ontological determination) and *how* it is known (universality, univocity, and so on). Confusion on this distinction has resulted historically in the attribution of a separate, *real esse* to accidents which are *understood predicamentally* as forms and substances. But, as the author maintains, although we attribute an *esse* to a substantialized accident in our understanding, the accident in being exists through the *esse* of the supposit. Hence real accidents do not have a separate *esse*.

Secondly, the doctrine of analogy is presented in its full vigor. The progressive development of metaphysics reveals several irreducible, overlapping analogies in being. For example, finite beings and their principles are analogous in several different ways, depending on the relational considerations involved. Father Klubertanz warns against an oversimplified reduction of analogy to one type. Metaphysical investigation reveals that the analogies of being are only analogously similar to each other.

From the teacher's point of view Father Klubertanz's textbook is helped by the inclusion of a large number of well-chosen English translations from St. Thomas. Practical considerations of size, however, necessarily limit the pedagogically desirable number of inductive examples. This latter point is left to the teacher.

This book is in many ways an invaluable guide in the search for metaphysical knowledge. It is a most welcome companion to the author's earlier *Philosophy of Human Nature*.

Father Edmund Ziegelmeyer has given us a quite readable translation of the second revised edition of Monsignor de Raeymaeker's *Philosophie de l'être. Essai de synthèse métaphysique*. This text is already well known in America as an approach to metaphysics through the analysis of human consciousness.

Reflection on the limitations of personal consciousness reveals that our ego is necessarily bound up with the world of the nonego. Moreover, this movement of reflection is simultaneously the epistemological guarantee of the certitude of our knowledge of both the ego and the nonego. Our sense life, which is completely organic, tends to obscure the processes of intellection.

Furthermore, consciousness of the ego contains an awareness of the self which is relative and an awareness of being which is absolute. This apprehension of the absolute value of being enables the human knower to

transcend the distinction of ego and nonego, both of which are relative, and thus establish the science of being. Hence metaphysics is specified as the science of being in its absolute value which transcends both the empirical data of the nonego and the subjective structure of the ego. The author defines the absolute value of being as follows: "Being is absolute, that is to say, considered as being, it is not relative to anything besides itself; for a relation with nonbeing could only signify an absence of relation" (p. 24). This definition is crucial. It appears to this reviewer to denote a logical property of our conception of being rather than the ontological intelligibility of existence which is the formal object of metaphysics.

For Monsignor de Raeymaeker the fundamental problem of metaphysics is the reconciliation of the one and the many, or, more accurately, the participation of relative modes of being in the absolute value of being. The solution of this general problem at the various levels of being and causality reveals the various intrinsic and extrinsic principles of being. By participation Monsignor de Raeymaeker means that particular beings possess certain perfections incommunicably; nevertheless, they are not themselves the adequate explanation of these perfections. The proof of the existence of God affords the ultimate reason of participated being.

Monsignor de Raeymaeker rightly asserts that "metaphysics cannot consist in a study of abstract essences" (p. 327). Metaphysics must deal with our experience of real being. Self-consciousness is undoubtedly part of this experience. But also included is a great deal of direct sensio-intellectual apprehension of extramental existents which cannot be underrated in metaphysics.

Professor Lazerowitz's *The Structure of Metaphysics* is a series of twelve independent essays dealing with various metaphysical problems. All but three have previously been published in various journals. Nevertheless, the volume reads with considerable unity because of the frequent recurrence of several interesting problems. For example, why is it that philosophers, unlike scientists, never seem to be able to agree on anything, even the most fundamental issues? Or again, why do some philosophers persistently hold theoretical views, like the denial of change or physical reality, which they themselves betray in their everyday actions?

Reflection on these perplexities has led Professor Lazerowitz to distinguish three levels of metaphysical thought. On the surface a metaphysical judgment gives the illusion that it deals with reality. Further analysis reveals, however, that the metaphysician has introduced, often unconsciously, a clever linguistic innovation in the meanings of commonly used terms. For example, in the metaphysical judgment "Change is impossible," the term



"change" has been skillfully altered from its commonly accepted meaning. If we ask why the metaphysician constructs such semantic illusions, the third and deepest level of metaphysical thought presents itself. Metaphysical judgments are attempts to bring our conscious life into adjustment with the deep-seated psychological fears and wishes of the unconscious. For example, the denial of change by some individual philosopher may be an attempt to quiet his fear of death in the unconscious. Hence the disagreement and apparent inconsistencies of philosophers have a psychological explanation.

This purely subjective nature of metaphysics ultimately derives from the author's view that metaphysics is concerned only with a-priori judgments. An experiential justification of a metaphysical view is out of the question. This extreme subjectivism should lead us to a fundamental re-examination of the value of the distinction between a-priori and empirical judgments as stemming from Leibniz and Kant. Does metaphysics deal with a-priori as distinct from empirical judgments? If this dichotomy is accepted, subjectivism must ultimately follow. If it is not accepted, other distinctions of knowledge are available to establish metaphysics as a science of the real. Furthermore, the recognition of the illusory nature of metaphysical judgments mentioned above implies that Professor Lazerowitz possesses a nonillusory knowledge of reality as a principle of evaluation. But unfortunately this latter type of knowledge does not come under investigation. Could such knowledge be developed into a realistic metaphysics?

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***Der Mensch als Mitte.*** By Josef Endres. Bonn: H. Bouvier u. Co. Verlag, 1956. Pp. 172. Paper, DM 9.50.

This work adds another volume to the series "Mensch und Welt," a collection dealing with problems especially pertinent to the present time and in which eight monographs have already appeared in the last three years, testifying to the activity of the Dominican editor, Father Fenyvessy. The present volume by the Redemptorist Father Endres, who is well known to the readers of *Divus Thomas* (Freiburg), is a clear and forceful presentation of the philosophy of man. The book develops this philosophy according to the principles of St. Thomas Aquinas, metaphysical, physical, and ethical, and discusses the entire theme throughout, with remarkable pene-



tration, against the background of the current philosophical and scientific views.

The title, *Man as a Mean*, expresses the basic motif of the book. The notion understood by *mean* is illustrated through two examples. One is that of truth, which is a mean not by way of compromise between opposite falsehoods but as a synthesis of all that is true in each of the contrary errors, a synthesis which is *specifically* different from either (p. 12). The other example is that of the virtuous mean, which is not a mediocrity but the high point of moral excellence, again specifically different from both contrary vices; and in the theological virtues it is a mean which makes a man rise above himself (p. 15). In these profound senses man is a mean between the merely corporeal and the entirely incorporeal, not as an externally united duality of opposites which retain their own specific characters, but as a true unity which is specifically different from either the purely corporeal or the purely incorporeal. For in man there is not a strict contrast between body and soul. The *spiritual* soul (*der Geist*) is the very form which along with the matter constitutes the body. From this basic substantial *unity* proceed *both* corporeal and spiritual functions (p. 111).

Father Endres is keenly aware that this substantial unity of man is not easy to understand. In fact, he characterizes it as the strangest and least to be expected of all types of union. But for that very reason it expresses in the most striking way the greatness of the Creator, just as the skill of an artist is best shown when he works out his conception in extraordinarily difficult material (pp. 111-12). The peculiar nature of this substantial unity requires that everything subspiritual in man should exist on account of the spiritual and so counters any fear that man because corporeal may be looked upon as a means and not as an end or be regarded as a material *thing* which has been infused with consciousness (pp. 112-13). It shows how man is a mean which remains open to what is above himself, so that man finds himself and becomes his nature in the fullest sense when he goes beyond himself and directs himself in his free conduct to the mean par excellence (*die eigentliche Mitte*), to whom he owes his being (p. 165). It results in conclusions which explain the twofold aspect of man as a person and at the same time as *part* of a community, as mortal and yet immortal, as endowed with both sensible and intellectual cognition, as free and yet as bound by moral law, as subject to anxiety and nevertheless secure (pp. 129-64).

The special merit of the work lies in the manner in which it handles the worthwhile features in current thought—for instance, notions about personality—which have been so strongly emphasized by recent philosophers such as Heidegger, Jaspers, M. Scheler, N. Hartmann, Sartre, to mention only

a few of those whose views are discussed. From these live sources it incorporates valuable insights into the philosophy of man by showing how what is true and appealing in their observations follows beautifully from the Thomistic conception of man's spiritual unity. The author's skill in handling such tenets emerges from the way in which he makes use of the emphasis and at times even of the terminology of the moderns without ever yielding to the temptation of allowing these features to retain the specific character which they had in their original sources. For instance, the status of man as a creature (*das Geschöpfsein*—[p. 116]) is not permitted to be bracketed for the discussion of modern philosophical themes. In this way the treatment is a living illustration of the basic example used of truth as a mean which gives a new specific nature to whatever it may absorb from any opposed views. The procedure likewise exemplifies how Thomistic principles, which in the thirteenth century could absorb and transform the meaning of so much that was true in Greek and Arabian sources, can still assimilate in vital fashion all that is best and most striking in modern thought and research, though now as then they have to give a specifically new character to everything that they encounter.

The book is written in a lucid and easy style that neatly exploits the force of German word-structure to press home philosophical meaning. It contains a bibliography and an index of names.

## THE NUMBER OF TERMS IN THE SUAREZIAN DISCUSSION ON ESSENCE AND BEING

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### I. The Problem of the Terms in the Suarezian Discussion

In the thirty-first of his *Metaphysical Discussions*,<sup>1</sup> Francisco Suarez, having already treated of the Primary Being, proposes to deal with the other member of being's widest division; namely, with the finite and created. First of all, Suarez examines the distinction of being and essence in creatures, listing the various "opinions" on the question.<sup>2</sup> Then he investigates the status of essence prior to its production by God<sup>3</sup> and the difference between essence so considered, which is essence as objective potency, and actual essence, which some have considered to be real subjective potency.<sup>4</sup> Maintaining that a subjective potency to being would be *actual* essence, he locates the problem as that of the distinction between a thing's actual essence and its actual existence. Having emphasized what *actual* essence implies, Suarez shows in clear and flawless reasoning that nothing real *need* be, or *can* be, added to the actual essence in order to make such an essence exist.<sup>5</sup> Consequently he is able to conclude without the least hesitation that any real or modal distinction here is both useless and impossible.<sup>6</sup>

Between actual essence and actual existence in creatures, however, Suarez claims to find a distinction of reason with a basis in reality, the type of distinction which suffices for the categorical assertion that actually to exist is not of a creature's essence.<sup>7</sup>

The present inquiry is concerned principally with this last step in the Suarezian procedure. In establishing a conceptual difference between a thing's essence and existence, Suarez not only sees flaws in the attempts of previous thinkers to arrive at such a distinction but also seems to run into considerable difficulty in explaining his own stand.<sup>8</sup> No longer, at least to a reader trained in the metaphysical technique of St. Thomas Aquinas, has he the air of proceeding with the unhesitating and limpid reasoning in which he had shown the impossibility of a real or modal difference. Rather, he seems to pass back and forth from one notion of essence to another. True, he claims explicitly that he is locating his distinction between the concept of

<sup>1</sup>*Disputationes Metaphysicae*, xxxi; *Opera Omnia* (Paris: Vives, 1856-77), xxvi, 224b. "Terms" in the present study renders what Suarez calls the *extrema* of either a distinction (for instance, "... non distingui . . . tanquam duo extrema realia . . ." [*ibid.*, 1, 12; 228a]) or an identity (for instance, "... de identitate reali . . . quia haec non est nisi inter extrema positiva et realia . . ." [*ibid.*, 2, 9; 232a]).

<sup>2</sup>*Ibid.*, 1, 1-13; 224b ff. The doctrines of the metaphysicians are drawn up by Suarez as though they were different "opinions" on the same question, quite according to the way in which a problem is treated by the moralists. M. Grabmann, "Die Disputationes Metaphysicae des Franz Suarez," *Mittelalterliches Geistesleben* (München: Max Hueber, 1926), p. 534, notes: "Seine Arbeitsweise gemahnt an diejenige seines Lehrers in Salamanca, Henrico Henriquez, dessen Summa theologiae moralis nach der historisch-positiven Seite äusserst reichhaltig ist." Similarly, D. Bañez, *Scholastica Commentaria in Primam Partem Summae Theologicae S. Thomae Aquinatis*, 1, 3, 4, ed. L. Urbano, (Madrid-Valencia, 1934), 1, 147a, had concluded, in the fashion of the moralists, that the real distinction is the *multo probabilior sententia*, while the

modal distinction *potest probabiliter sustineri* (*ibid.*, 1, 147b). Such a method shows little sensitivity to the requirements of a properly metaphysical procedure, in which opposed conclusions indicate radically different metaphysical starting-points from which they follow with rigorous cogency, not just "probably."

<sup>3</sup>*Dis. Metaphys.*, xxxi; Vives, xxvi, 229a ff.

<sup>4</sup>*Ibid.*, 3, 1-8; 233a ff. So "... essentia autem sub ea consideratione non est in potentia receptiva, sed mere objectiva. Igitur, ut illa locutio et similes aliquem verum sensum habere possint, juxta praedictam sententiam, necesse est intelligi de essentia in actu, quae comparata ad esse, est potentia receptiva illius . . ." (*ibid.*, 5; 234b).

<sup>5</sup>*Ibid.*, 4-5; 235b ff.

<sup>6</sup>*Ibid.*, 6, 1-11; 241b ff.

<sup>7</sup>*Ibid.*, 6, 13; 246a. Text *infra*, n. 82.

<sup>8</sup>*Ibid.*, 6, 13-24; 246a ff.

<sup>9</sup>For instance, "... si utraque actu sumatur, solum distingui ratione cum aliquo fundamento in re . . ." (*ibid.*, 6, 13; 246a). "... essentiam sub propria ratione essentiae, non tantum ut potentialem, sed etiam ut actualem incipimus, et sic etiam illam ratione distinguimus ab existentia" (*ibid.*, 22; 249b).



*actual* essence and the concept of actual existence,<sup>9</sup> the concepts of the same terms (*extrema*) whose real identity he had demonstrated. Yet in spite of his protestations he seems finally to emerge with a distinction between, on the one hand, a concept of essence which pre-scinds from both the potential and the actual and so is *devoid* of all intrinsic actuality in its content and, on the other hand, a concept of *actual* existence. The first term (*extremum*) of the Suarezian distinction between essence and existence, consequently, appears to be quite different from the kind of essence which was found to be identical in reality with existence. Has Suarez in fact changed the first term of the distinction in passing from his rejection of real difference to the assertion of a conceptual distinction? Is it only in this manner that he claims to succeed where he recognizes that so many of his predecessors from Henry of Ghent on have failed?

The situation raises a very actual and interesting question in the present state of metaphysical inquiries regarding human knowledge of being. Reflections of thinkers like Kant and Hegel have shown clearly enough that when "being" is regarded as merely another way of conceptualizing the content of essence or nature, it becomes just in itself an entirely empty concept; it has no content over and above what is already expressed in the notion of the thing; it is just in itself the equivalent of "nothing." Is there any possible way, then, of denying a real distinction between a thing and its being, and then asserting a conceptual distinction between them? Must not such a procedure necessarily require in the notion of being a conceptual content over and above that of the thing's nature or essence? But what foundation can there be in reality for a distinct content in the notion of being, given that any real difference between the thing and its being has already been explicitly denied?

Such is the impasse to which the Suarezian procedure, viewed from the present distance of time and philosophical perspective, would inevitably appear to lead. How was it met by Suarez himself? Was it merely avoided by a subtle change in one of the two terms while passing from real identity to conceptual distinction? Did Suarez himself fall victim to the same snare which lay concealed under the flaws

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that he recognized<sup>10</sup> in the arguments of his predecessors who had denied a real distinction?

The answer to such questions, presumably, will lie in a careful scrutiny of the terms (*extrema*) which Suarez is identifying in reality but distinguishing conceptually. Does he retain the same two terms in both stages of his treatment, or does he change one or the other of them? Has he succeeded in showing that a distinct conceptual content may be given to being after being has already been really identified with the thing, or has he like so many others fallen victim to a persistent illusion in this regard? Such is the focal point of interest in the present study.

## II. The Terms as Kinds of Being

Since a comparison of essence and being is fundamental for explaining the notion of a creature, Suarez commences,<sup>11</sup> and since it is couched in words which lie open to ambiguity, it calls for an initial clarification of its two terms, essence and being. "Being," he reports, is open to a fourfold acceptation—namely, essential being (*esse essentialiae*), existential being (*esse existentiae*), subsistential being (*esse subsistentiae*), and the being of the truth in a proposition (*esse veritatis propositionis*).<sup>12</sup> Of these, the latter two may be excluded from the present problem. Subsistential being is too narrow in its scope to form a term in this question, since it is restricted to one category of being, substance; and the truth in a proposition is not of itself a type of real being but rather an objective kind found in the intellect.<sup>13</sup> Accordingly, only the first two types of being, essential and existential, call for scrutiny in approaching this problem.

Before examining Suarez's own investigation of these two kinds of being, one may be permitted to ask a preliminary question in seeking English equivalents for the phrases involved. What is the exact grammatical force of the genitives in the medieval Latin expressions *esse*

<sup>10</sup>*Ibid.*, 6, 16-21; 247a ff.

<sup>11</sup>"... ideo ad declarandum rationem entis creati, a comparatione essentialiae et esse initium suminus. . . . radix vero omnium est id quod proposuimus, scilicet quodmodo esse et essentia distinguantur" (*ibid.*, 1, 1; 224b).

<sup>12</sup>"... ne sit aequivocatio in verbis,

nec sit necessarium postea distinguere de esse essentialiae, existentiae, aut subsistentiae, aut veritatis propositionis" (*ibid.*, 1, 2; 224b). Cf. "... absque terminorum aequivocatione, quam vereor esse frequentem in hac materia . . ." (*ibid.*, 13; 228b).

<sup>13</sup>*Ibid.*, 1, 2; 225a. Text *infra*, n. 27.

*essentiae* and *esse existentiae*? In English, the formulae "the being of essence" and "the being of existence" would render them literally enough. But these English expressions are as awkward as the Latin originals must have sounded in the late thirteenth century, if any of Henry of Ghent's students had ears trained to a liking for the purity of the ancient Roman tongue. However, more liberties could naturally be taken with a language which was no longer the vernacular than can be allowed in present-day English. But what is more serious, these awkward English equivalents conceal the same ambiguity to which the grammatical structure of the Latin phrases could give rise. The genitives, as the phrases stand, could be either qualitative or possessive.

True, the genitive in *esse existentiae*, on account of what the notion "existence" signifies, could hardly be understood in any other than a qualitative sense, signifying the *kind* of being which is meant by "existence." Accordingly, this expression may without danger of misunderstanding in a metaphysical context be rendered by the English phrase "existential being." The genitive in the phrase *esse essentiae*, however, as far as sense is concerned, may be taken either as qualitative or as possessive. It may signify "the being which is essence" and so mean the type of being which *coincides* with essence. In this case it could be translated "essential being." On the other hand, the phrase *esse essentiae* could imply the notion of "the being which the essence possesses." Instead of appearing as identical with the essence it could now be contrasted with essence as something *different* from, and possessed by, the essence. If the expression is taken in this latter sense, the distinction between essence and being would consist in a difference between the *esse essentiae* and the essence itself. The distinction would fall between the *being* of the essence and that very essence. In this acceptation *esse essentiae* could not so well be translated "essential being," unless a careful explanation of the phrase in such a sense were first given and then constantly kept in mind.

Suarez himself, in his desire to set aside any ambiguity, immediately undertakes to define with all the precision proper to a legally trained mind the kind of being which is contrasted with essence in the histor-

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ical problem of the distinction between essence and being. He examines the notions which he had listed respectively in the first and second place, essential being and existential being. By essential being he understands a kind of *being* which adds nothing real to the essence. The difference between essential being and essence lies only in the manner of conception and signification.<sup>14</sup> Accordingly, Suarez is taking the genitive here in a qualitative sense. He is understanding the phrase as meaning "essential being" in the natural signification of this English rendition; that is, as denoting the kind of being which coincides with essence. No thought of a real distinction between the essence and its essential being is even entertained. Any distinction between them will be only a distinction between two ways of conceiving the same essence or between two different expressions for the same thing. In other words, any difference between them will be at

<sup>14</sup>"Nam esse essentiae, si vere condis-tinguitur ab existentia, nihil rei addit ipsi essentiae, sed solum differt ab illa in modo quo concipitur vel significatur . . ." (*ibid.*, 1, 2; 224-25). Cf. also texts *infra*, nn. 16 and 62. On Suarez's earlier training in canon law and to a certain extent in civil law, cf. R. de Scorraile, *François Suarez* (Paris: Léthiellieux, [1912-13]), I, 30-32.

<sup>15</sup>"Si loquamur de primo esse creaturae: illud sola ratione differt ab essentia creaturae . . ." (Henry of Ghent, *Quodl.* 1, 9 [Paris, 1518] fol. 7r/v). Cf. "La question que soulève ici Henri n'est pas celle de la distinction réelle à établir entre l'essence et l'existence. Non, c'est celle de la distinction de l'être de l'essence d'avec l'essence elle-même. . . . L'être de l'essence et l'essence sont su seul et même concept, et on ne peut y trouver aucune base même pour une distinction de raison" (P. Mandonnet, "Les premières disputes sur la distinction réelle entre l'essence et l'existence, 1276-1287," *Revue Thomiste*, xviii [1910], 756-57). Such was the way in which the *esse essentiae* continued to be viewed by a student of St. Thomas at the beginning of the present century.

<sup>16</sup>Cf. "Dico secundo: haec constitutio non fit per compositionem talis esse cum tali entitate, sed per identitatem omnimodam secundum rem" (*Dis. Metaphys.*, xxxi, 4, 3; Vives, xxvi, 235b).

<sup>17</sup>"Et hoc est quod fortasse appellamus esse proprium; nec intendimus per illud nisi intentionem esse affirmativi, quia verbum ens signat etiam multas intentiones, ex quibus est certitudo qua est unaquaeque res; et est sicut esse proprium rei" (Avicenna, *Metaphys.*, tr. 1, c. 6C; [Venice, 1508], fol. 72v1). So, for example, Henry of Ghent: "Et est hic distinguendum de esse secundum quod distinguit Avicenna in quinto in fine *Metaphysicae suae*, quod quoddam est esse rei quod habet essentialiter de se, quod appellatur *esse essentiae*; quoddam vero quod recipit ab alio, quod appellatur *esse actualis existentiae*" (*Quodl.* 1, 9; Paris, 1518, fol. 7r). "Unum enim habet esse naturae extra in rebus, alterum vero habet esse rationis, tertium vero habet esse essentiae" (*ibid.*, iii, 9; fol. 61r). ". . . esse essentiae rei appellatur certitudo ejus concepta absolute absque omni conditione quam nata est habere in esse naturae vel rationis" (*ibid.*, fol. 61v). Godfrey of Fontaines: ". . . dicendum quod si ita esset quod esse et essentia differrent re in creaturis, magis posset poni quod creatura posset habere esse essentiae sine esse existentiae quam quod materia posset esse sine forma, quia essentia majorem actualitatem includit quam materia, licet non sit tanta quod possit esse in rerum natura secundum communem cursum sine esse existentiae" (*Quodl.* iii, 1; ed. de Wulf-



most a conceptual and perhaps just a nominal distinction.

Henry of Ghent, in the beginning of the historic controversy on the whole question, had similarly declared that only a distinction of reason fell between essence and essential being.<sup>16</sup> But he had not offered any explanation of how the two concepts were distinguished. Like Henry, Suarez has no interest in further examining the nature of this proposed conceptual distinction. Suarez is concerned only to imply that no problem of a real distinction can arise here; the two terms of the controverted distinction cannot be essence and essential being. He is content merely to take for granted that any distinction maintained between these will at most be a conceptual distinction, insisting only that essential being is *completely identified*<sup>17</sup> in reality with essence.

The being which is signified by *esse* in the phrase *esse essentiae* is therefore definitely not the being which is to be distinguished from essence in the problem under discussion. It is, true enough, a kind of *being*, but it is a type of being which is straightway identified with essence and considered as the first term of the proposed distinction. It coincides with essence and is contrasted for purposes of the distinction with another kind of being, existential being. The kind of *being* which is signified by the formula "essential being" falls consequently on the side of the first term in the present problem. It is in fact precisely what is to be distinguished from "existence," either really or conceptually.

Suarez's acceptance of the phrase *esse essentiae* in this sense is in full accord with the long history of the expression. From Henry of Ghent on, the genitive *essentiae* was regularly understood as qualitative. It specified a type of being which corresponded to what the Latin rendition of Avicenna had termed the "proper being" (*esse proprium*) of the essence, as distinct from the further being which the essence acquired in the mind or in reality. Except in the remarkable case of St. Thomas Aquinas, it was the type of being which the medievals who had developed their metaphysical doctrines against this Avicennian background assigned to the essence in its own nature, essence considered in abstraction from real or cognitional existence. It was unhesitatingly identified in this tradition with the essence itself and was regularly contrasted with actual existential being.<sup>17</sup>

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In its historical background, accordingly, the grammatical structure of the phrase *esse essentiae* is to be interpreted in exact correspondence with that of the phrase to which it was regularly opposed, *esse existentiae*. The genitive in the latter expression, as has been noted, is clearly qualitative. The genitive in *esse essentiae* may likewise be expected to occur invariably in a qualitative sense. It may therefore be regularly translated "essential being." As Suarez uses it, moreover, this rendition need not give rise to any hesitation, since he employs the Latin *esse essentiale* synonymously with *esse essentiae*.<sup>18</sup> The possibility that the genitive might have the force of a possessive which would allow the essence to be understood as other than the being may for practical purposes be ruled out of consideration. Suarez, as a matter of fact, in locating the terms for the problem of the distinc-

Pelzer, in *Les philosophes belges* [Louvain, 1904], II, 304). Duns Scotus: ". . . esse, sive essentiae sive existentiae, quia unum non est sine altero, qualitercumque distinguantur . . ." (*Op. Ox.*, I, 36, 1, no. 11; ed. M. F. Garcia [Quaracchi, 1912], I, 1177 [no. 1084]). On St. Thomas Aquinas, cf. *infra*, n. 20. On *esse essentiae* and *esse existentiae* in Giles of Rome, cf. P. Nash, S.J., "The Accidentality of Esse according to Giles of Rome," *Gregorianum*, XXXVIII (1957), 107-11.

<sup>18</sup>"Alio modo sumitur esse essentiae, ut actu convenit creaturae. . . , et consequenter esse essentiale illius esse actuale esse" (*Dis. Metaphys.*, XXXI, 2, 11; Vives, xxvi, 232b). In another connection, Suarez writes: "Si vero loquamur sub his nominibus *esse essentiae* et *esse existentiae*, utrumque habet eundem significandi modum et subordinatur eidem modo concipiendi" (*ibid.*, 6, 19; 248a).

<sup>19</sup>*Ibid.*, 1, 1-2; 224-25. Cf. texts *supra*, nn. 14 and 16.

<sup>20</sup>In the *De Ente et Essentia* of St. Thomas Aquinas, the notion of essence, though sketched in the Avicennian background, abstracts from all being whatsoever: "Ergo patet quod natura hominis absolute considerata abstrahit a quolibet esse, ita tamen quod non fiat precisio alicuius eorum" (*De Ente*, cap. 3; ed. Roland-Gosselin [Paris: Vrin, 1948], p.

26 ll. 8-10). Elsewhere St. Thomas states that *every* aspect of being comes from without, and that only the *lack* of being is contributed by the finite thing: ". . . ita quod quaecumque rationem essendi aliquid habeat, non sit sibi nisi a Deo, sed defectus essendi sit a seipso" (*In II Sent.*, d. 37, q. 1, a. 2, sol.; ed. P. Mandonnet [Paris: Lethielleux, 1929], II, 946).

<sup>21</sup>" . . . sicut essentia creaturae ut sic, ex vi sui conceptus non dicit quod sit aliquid reale actu habens esse extra causas suas, ita esse essentiae ut sic, praecise in illo sistendo, non dicit esse actuale, quo essentia extra causas constituatur in actu; nam si esse in actu hoc modo non est de essentia creaturae, nec pertinere poterit ad esse essentiae ejus; ergo esse essentiae creaturae ut sic ex se praescindit ab esse actuali extra causas, quo res creata fit extra nihil, quod nomine esse existentiae actualis significamus" (*Dis. Metaphys.*, XXXI, 1, 2; Vives, 225a). For Suarez, accordingly, essence not only abstracts but also pre-scinds from existence. In fact, the two notions of abstracting and pre-scinding are used synonymously by him (cf. texts *infra* nn. 84 and 97), or at least precision is taken as a subdivision of abstraction (cf. text, n. 92 *infra*). For St. Thomas, on the contrary, finite essence abstracts but does not pre-scind from being. Cf. Suarez, *ibid.*, II, 4, 9; xxv, 90b, and the text from *De Ente*, *supra*, n. 20.

<sup>22</sup>Cf. *supra*, nn. 3-7.

tion, from the start explicitly identifies essential *being* with the essence and contrasts it with the existential being which forms the other term of the distinction.<sup>19</sup>

For Suarez, then, the first term in the problem, "essence," clearly means "essential *being*." It explicitly signifies a certain type of *being*, even though that kind of being coincides with the essence itself. The term "essence," accordingly, as it plays its role in the problem under discussion, by no means abstracts from *all* being.<sup>20</sup> It is not conceived as of itself not having any kind of being whatever in abstraction from the existence which it receives in reality or in the mind; it is not introduced as of itself simply lacking all being. In Suarez's own description as well as in the historical background from which he took the phrase *esse essentiae*, the first term of the problem, essence, is understood as a definite type of *being* in its own right, though it purports to be conceived under the aspect of "being" without the injection of any existential characteristic.

Even with these features made clear, however, the notion of "essential being" for Suarez is still not free from ambiguity. It is introduced as something which on the strength of its own proper concept does not imply real actual being outside its causes. Of itself it *prescinds* from such actual being, and in this precision it is contrasted with actual existential being in the opening section of the thirty-first *Metaphysical Discussion*.<sup>21</sup> Yet the Suarezian procedure, as sketched above,<sup>22</sup> expressly seeks to establish the real identity and conceptual distinction of *actual* essence and actual existence. In the introductory presentation of the key notions, however, what is contrasted with actual existence is a type of essential being which, taken just on the strength of its own concept, prescinds from actual being. Certainly the danger of ambiguity seems latent in this procedure.

Later on, accordingly, a twofold signification of essential being is in fact explicitly emphasized. "Essential being" may be attributed to creatures, first, as taken just in itself, even though the creatures are not yet existent. In this sense it means *possible* being and so signifies being merely in its causes or objectively in the intellect. It is accordingly classed under cognitional, not real, being. Secondly, "essential

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being" may mean actual being, as found in existing things, whether such actual being be distinguished really or conceptually from existence. This distinction between possible and actual essential being has to be kept in mind, Suarez insists, in order to offset the dangers of ambiguity and to understand the force of the arguments used in the whole question.<sup>23</sup>

The first kind of essential being, then, is merely possible being, and as such is found only in cognition and not in reality. Does this coincide exactly with the introductory notion of essential being which was given in the opening section of the *Discussion*?<sup>24</sup> There the sense was that of essence on the strength of its own concept, essence which prescinded from actual being outside its causes. Here likewise the

<sup>23</sup>"... advertendum est, aequivocationem esse posse in primo membro, scilicet, esse essentiae. Duobus enim modis attribuitur rebus creatis. Uno modo secundum se, etiam ut nondum sunt factae, neque actu existentes. Et hoc modo esse essentiae non est verum esse reale actuale in creatura, ut demonstratum est, sed est esse possibile, et revocatur ad illud tertium membrum de esse veritatis propositionis seu cognitionis; nam, ut ostendimus, essentiae creaturarum hoc modo tantum habent, vel esse in causa, vel objective in intellectu. . . . ideo peculiariter tribuitur rebus creatis esse essentiae antequam existant, ut denotetur illam veritatem fundari in esse potenciali apto ad existendum. Alio modo sumitur esse essentiae, ut actu convenit creaturae jam existenti, et hoc esse est sine dubio reale et actuale, sive re, sive ratione tantum ab existentia distinguatur . . . Et haec distinctio est prae oculis habenda ad tollendam aequivocationem et intelligendam efficaciam rationum, quae in hac materia fieri solent" (*Dis. Metaphys.*, xxxi, 2, 11; Vives, 232b). On certain ways in which potential essence may be considered real and actual, cf. texts *infra*, nn. 49 and 50.

<sup>24</sup>Text *supra*, n. 21.

<sup>25</sup>Cf. "... essentia, abstracte et praecise concepta, ut est in potentia . . ." (*Dis. Metaphys.*, xxxi, 1, 13; Vives, 228b). "... si essentia creaturae praecise ac secundum se sumpta, et nondum facta . . ." (*ibid.*, 2, 10; 232a). Nevertheless, the essence just in itself may be con-

trasted with its objective status: "... essentias reales, non secundum statum quem habent objective in intellectu, sed secundum se, vel quatenus aptae sunt ad existendum . . ." (*ibid.*, 232b). It may also be looked upon as common or indifferent to both potential and actual essence; cf. texts *infra*, nn. 85, 92, and 97.

<sup>26</sup>"Nam per existentiam res intelligitur esse aliquid in rerum natura; oportet ergo ut et ipsa aliquid reale sit, et sit intima, id est intra ipsam rem existens" (*ibid.*, 1, 2; 225a). "Certum est apud omnes, existentiam esse id quo formaliter et intrinsece res est actu existens . . ." (*ibid.*, 5, 1; 237b). "... certum tamen est existens ut sic per solam existentiam formaliter constitui, et in hoc genere quasi formalis causae ab illa sola pendere . . ." (*ibid.*). However, "... de entitate essentiae, et entitate existentiae, si essent distinctae; componerent enim unum, verbi gratia, hoc existens, respectu cuius existentia se haberet ut actus intrinsecus et formalis; tamen respectu entitatis essentiae nullo modo posset intrinsece illam constituere aut componere, quia una ab alia condistingueretur, ut entitas simplex ab entitate simplici" (*ibid.*, 6, 3; 242b). "Verissimum etiam est existentiam non posse esse causam formalem intrinsece constituentem actualem entitatem essentiae. Hinc tamen concludimus, nullam posse assignari constitutum propter quod talis entitas necessaria sit . . ." (*ibid.*, 6; 243b). The force of this intrinsic character of existence for Suarez, accordingly, is such



first notion of essential being is introduced as taken just in itself. But a negative restriction is made immediately by adding as a condition the nonexistence of the creature. Does the necessity of appending this restriction imply that essential being taken just in itself could be found indifferently in either potential or actual essence?

An indifferent or common notion of essence, naturally, could be expected in this context on account of the Avicennian background of the long historical controversy, in which essence taken in itself included neither real nor cognitional being but was common to both. Essence just in itself and on the strength of its own concept, accordingly, should be found in both potential and actual essential being. For practical purposes, however, Suarez here as elsewhere in the *Discussion*,<sup>25</sup> may limit the notion of "essential being just in itself" to potential being, somewhat arbitrarily, by adding as a restriction the nonactuality of the essence. From this standpoint the basis for his consideration is the difference between real and cognitional being. Actual essence is properly real being; essence as just in itself and potential essence have only cognitional being. To that extent the two latter have the same status, and from that viewpoint they may for Suarez be contrasted with actual essence. Suarez himself is not concerned with emphasizing either their identity or their distinction from each other. Yet as far as can be surmised from the texts just considered, one may be prepared to find three senses of the Suarezian "essential being," first as just in itself, secondly as possible being, and thirdly as actual being.

The other term of the distinction, which is called "existence" or simply "being" (*esse*), is described as meaning the actual being of things outside nothing and outside their causes. It is that by which, formally and intrinsically, a thing is actually existing. The force of the notion "intrinsically" is not explained for the moment, except through contrast to an extrinsic denomination and to a being produced only in human reason. It quite evidently, however, means being which is intrinsic to the existent, when the existent is *considered* as in some way a composite which contains within itself both essence and existence. However, Suarez explains that while intrinsic to the existent, it would not be intrinsic to the essence itself if the two were really distinct.<sup>26</sup>

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What type of being corresponds to such a description of existence? Of the four kinds of being originally listed, existential being is the only type found to meet these requirements for the second term in the distinction between essence and being. "Essential being" is completely identified with essence as the first term of the distinction. "Subsistent being" is not only too narrow but also is separable from the substantial existence of a creature. "The being of the truth in a proposition" is not of itself a real and intrinsic type of being.<sup>27</sup> "Existential being," in the sense of actual being outside nothing and outside causes, is accordingly the only kind of being which can constitute the second term of the problem in question.

To avoid ambiguity, then, the distinction between essence and being is posed by Suarez as the distinction between essential *being* and existential *being*. Yet ambiguity is still possible. Just as in the case of essential being, so also with existential being, as Suarez will show later,<sup>28</sup> is there question of a twofold sense. Existence, considered entirely in the line of existence, may be looked upon as either actual or potential. Actual existence, accordingly, is distinguished formally from potential existence by its own actual entity, which potential existence lacks. The notion of existence in the full extent of its signification,

that it entails real identity of essence and existence. "Si Suarez veut que l'existence de l'être soit au dedans de lui, c'est qu'il entend déjà qu'elle s'identifie avec lui" (Léon Mahieu, *François Suarez* [Paris: Desclée, De Brouwer, & Cie, 1921], p. 167). The notion carries its difficulties. Bañez, on the other side of the controversy, had concluded "existentia aliquid reale est, et intrinsicum rei existenti" (*In ST*, I, 3, 4; Urbano, I, 143a). But in arguing for his real distinction, Bañez is forced to maintain "solum ordo ad esse est intrinsecus omni rei" (*ibid.*, 147a). For some further historical details on characterizing existence as intrinsic or extrinsic, cf. I. Bonetti, "Il Valore dell'Esistenza nella Metafisica di San Tommaso," *Divus Thomas* (Piacenza), LIV (1951), 365-66.

<sup>27</sup>"Esse autem subsistentiae, et contractius est quam esse existentiae; hoc enim substantiae et accidentibus commune est, illud vero est substantiae proprium; et praeterea esse subsistentiae (ut suppono ex infra probandis) distinctum quid est ab esse existentiae substantialis naturae

creatae, et separabile ab ipso . . . Esse autem veritatis propositionis, ex se non est esse reale et intrinsicum, sed est esse quoddam obiectivum in intellectu componente, unde convenit etiam privationibus" (*Dis. Metaphys.*, xxxi, 1, 2; Vives, 225a).

<sup>28</sup>Cf. texts *infra*, nn. 64-65.

<sup>29</sup>Cf. ". . . talis entitas, addita actuali essentiae, nec potest illi formaliter conferre primam (ut ita dicam) actualitatem seu primam rationem entis in actu . . ." (*Dis. Metaphys.*, xxxi, 6, 2; Vives, xxvi, 242a). Essence in contradistinction to existence is considered: ". . . quasi primum constitutum illius rei" (*ibid.*, 15; 246b). For St. Thomas, on the contrary, "Primus autem effectus Dei in rebus est ipsum esse, quod omnibus aliis effectibus praesupponitur et ipsum non praesupponit aliquem alium effectum . . ." (*De Pot.*, q. 3, a. 4c; ed. Mandonnet, II, 52a). "Primus autem effectus Dei in rebus est ipsum esse, quod omnes alii effectus praesupponunt, et supra quod fundantur" (*Comp. Theol.*, cap. 68). Cf. *infra*, n. 80.

then, does not for Suarez necessarily denote actuality. Being, whether existential or essential, can designate the merely potential. But no matter how essence and existence may be taken, they are in any case expressed by Suarez as two types of *being*. His problem is whether or not these two terms are in reality one and the same kind of being, and if they are, how they are to be conceptually distinguished in a way that will safeguard the Christian doctrine of creation.

The terms of the Suarezian problem, accordingly, in a historical background which reaches to the last quarter of the thirteenth century, are expressed as two different kinds of *being*, essential being and existential being. So proposed, they are meant to bring up the question of whether, though expressed in human language as two different kinds of *being*, they are outside the mind two kinds or only one kind of being. In other words, are they really distinct in themselves, or does their distinction arise from the human manner of expressing them? In the actually and really existent thing itself, are these two alleged types of being identical or not? Each of the two terms is indeed expressed in a way that seems to indicate distinct proper being for each in its own right. But outside the mind, in the thing itself, are they two really different types of *being*? Or are essential being and existential being just one and the same kind of being in the existent thing? In this latter case, may they be conceived by the intellect in two different ways and expressed by intrinsically different concepts without allowing any real distinction between different kinds of being outside the mind?

The distinction, then, in the historical background in which Suarez wrote, is undoubtedly meant as a distinction between two types of *being*. It is *certainly not* a distinction between one term which lacks all being whatsoever (both real and cognitional), on the one hand, and on the other, the being which *first* makes that term *be*. On the contrary, the second term in the distinction, existence, is not presented as the first being of the essence.<sup>29</sup> Rather, existential being is explicitly contrasted with another type of being, essential being, being which belongs to the essence under the aspect of essence alone. The essence has its own being, is completely identified with its essential being; and that being, coinciding entirely with essence, is set up as the first

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term in the problem. The other term of the controverted distinction is also presented as being, namely, as existential being. The problem regards only the difference between these two types of being.

How can the question, in this framework, be other than whether an essence which *already is* needs further and really distinct being to make it exist? More pointedly, can an essence which already has *being* be constituted an *existent* by any other type of being than that being which it already has? Is a further type of being necessary to make such an essence exist, or is it even possible for a further type of being to exercise such a function in regard to an essence which already actually *is*? Presented in this way, how can the framework of the problem point to any but a decidedly negative answer to such questions? Indeed, if it were not for the historical fact that outstanding

<sup>80</sup>For example, Capreolus: "Quia, sicut dicit Henricus, et bene, meo iudicio, essentia habet duplex esse, scilicet esse essentiae, et esse existentiae . . ." (*Defensiones, In 11 Sent.*, 1, 2, 3; ed. Paband-Pègues [Turin, 1902], III, 76a). Cajetan: ". . . esse est duplex scilicet existentiae et essentiae . . ." (*In De Ente et Essentia*, cap. 5; ed. H. H. Laurent [Turin, 1934], no. 101, p. 158). St. Thomas, *In 1 Sent.*, d. 33, q. 1, a. 1, ad 1, (ed. Mandonnet [Paris: Léthiellieux, 1929], I, 766) reports the current use of *esse* to denote the essence of a thing. This usage, entirely in accord with the Aristotelian and Boethian traditions, may be seen in William of Auvergne: ". . . esse duas habet intentiones, et una earum . . . est propria quod nominatur essentia . . . Secunda autem intentio huius quod est esse, est illud quod dicitur per hoc verbum, est, de unoquoque, et est praeter uniuscujusque rationem" (*De Trin.*, cap. 2; ed. Paris [1674], p. 2b [suppl.]). But in his own usage St. Thomas consistently reserves the infinitive *esse* to denote the being which is other than the essence of finite things.

<sup>81</sup>"De hac igitur existentia creaturae variae sunt opiniones. Prima est, existentiam esse rem quamdam distinctam omnino realiter ab entitate essentiae creaturae. Haec existimatur esse opinio D. Thomae, quam in hoc sensu secuti sunt fere omnes antiqui Thomistae. . . . Quae sic interpretatur Capreol. . . . Item Aegid. . . . Ci-

tantur etiam Albert., sup. lib. de *Causis*, propos. 8; *Avicen.*, lib. quinto suae *Metaph.*, cap. primo" (*Dis. Metaphys.*, xxxi, 1, 3; Vives, xxvi, 225ab). The use which Suarez makes of his explicitly mentioned sources has been carefully studied by N. Wells, in an unpublished doctoral dissertation, "The Distinction of Essence and Existence in the Philosophy of Francis Suarez" (University of Toronto, 1955).

<sup>82</sup>" . . . differt ab eo cuius est actus re quidem . . ." (*In 1 Sent.*, d. 19, q. 2, a. 2, solut.; ed. Mandonnet, I, 471) ". . . compositum reali compositione . . ." (*De Ver.*, q. 27, a. 1 ad 8; in *Quaest. Disp.*, ed. Mandonnet [Paris: Léthiellieux, 1925], I, 693b). ". . . differunt realiter . . ." (*In De Hebd.*, cap. 2; in *Opusc.*, ed. Mandonnet [Paris: Léthiellieux, 1927], I, 175). The Thomistic distinction between a thing and its being, however, is wider than a real distinction. It means that the thing is different from the being which it receives in cognition as well as from the being which it receives in reality. Not only the being which the thing receives in reality but also the being which it receives in cognition comes from without the essence and ultimately from God. Cf.: "Sed hoc esse non est nisi esse rationis . . . et secundum hoc quod in ratione esse habet, constat quod a Deo est" (*In 11 Sent.*, d. 37, q. 1, a. 2 ad 3; ed. Mandonnet, II, 947).



commentators<sup>80</sup> had faced the problem in this framework and answered affirmatively, could one even hold the question worthy of any consideration at all? Outside such a peculiar historical background would the notion of a kind of *being* which is really different from *existence* ever be expected to arise?

As it is, one can only watch and see if the Suarezian treatment of the problem is in actual fact concerned with a useless and impossible addition of being to something which already *is*. Returning to the text of the thirty-first *Metaphysical Discussion*, one has the opportunity to observe how, after having set aside the initial ambiguity in the terms essence and being by locating them as essential being and existential being, Suarez proceeds to interpret the centuries-old controversy about the problem to which they have given rise when taken in this way.

### III. The Terms as Realities

Regarding existence in the sense just determined (that is, as actual existence), Suarez reports, there are different opinions. The first is that existence is a certain thing (*rem quamdam*) really distinct in the fullest sense from the entity of a creature's essence. This, Suarez says, is thought to be the opinion of St. Thomas. It is the sense in which almost all the ancient Thomists understand the problem. It is the teaching of Giles of Rome, and Albert and Avicenna are cited in its favor.<sup>81</sup>

Such is the way in which Suarez records the doctrine he is about to oppose. He seems to hesitate to attribute it to St. Thomas. He may have good reason for so hesitating, since the formulae in which this distinction is presented are nowhere used in the authentic works of the Angelic Doctor. Suarez lists the principal passages of St. Thomas which treat of the distinction between essence and being. Not one of these describes existence as a thing or a reality (*res*), and not one of them refers to essence as having an entity of its own when considered in abstraction from its existence. Nor does any of them characterize the distinction between a thing and its being as "real." Elsewhere on a few particular occasions<sup>82</sup> St. Thomas does use that desig-

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nation. These few places are sufficient to allow the word "real" as a designation for the Thomistic distinction; but their occasional character and their relative scarcity in comparison with the numerous passages in which no mention of "real" is made may easily give rise to a doubt about whether the notion "real" does full justice to the distinction set forth in the Thomistic texts. In any case, Suarez can well be reserved in attributing this first "opinion" absolutely to St. Thomas, just as his somewhat older contemporary, Bañez, had been cautious in naming the Angelic Doctor as its patron.<sup>33</sup> But with regard to those whom he cites as "Thomists," Suarez is on surer ground. Among the commentators from Capreolus on, in fact, he could hardly have any doubt at all. Of the more immediate followers<sup>34</sup> of St. Thomas, on the other hand, he does not include any in his list of the proponents of the real distinction, Harvey of Nédellec being placed among the defenders of a distinction of reason.

The mention of Giles of Rome, however, locates the doctrine very definitely. For Giles the formulae stating that being is *accidental* to creatures, is *received* in the nature of a creature, gives rise to a *real difference* in created things—these formulae were not enough to explain the distinction between essence and being in a way sufficient to safeguard the revealed doctrine of creation. To defend creation, essence and existence in creatures have to be established as two different things (*res*).<sup>35</sup> In the controversy which followed between Giles and Henry of Ghent, these two terms of the distinction received the names

<sup>33</sup>"Haec conclusio videtur esse D. Tho. in locis citatis" (Bañez, *In ST*, I, 3, 4; Urbano, I, 147a).

<sup>34</sup>For a survey, cf. E. Gilson, *History of Christian Philosophy in the Middle Ages* (New York: Random House, 1955), pp. 420-27; E. Hocedez, *Aegidii Romani Theoremata de Esse et Essentia* (Louvain: Museum Lessianum, 1930), pp. (84)-(117).

<sup>35</sup>Cf. texts cited by Hocedez, *Aegidii Romani Theoremata* pp. (13)-(16).

<sup>36</sup>The sort of Gallup Poll which Hocedez (*supra*, n. 34) has taken of the Dominicans during the seventy years after the death of St. Thomas results (*ibid.*, p. [106]) in an ideal Gallup Poll result: one third find the real distinction in St. Thomas; one third deny that it is there; and one third say that they do not know.

<sup>37</sup>For Giles, essence and existence were *res* in the same sense that matter and quantity were *res*. "Et, sicut materia et quantitas sunt duae res, sic essentia et esse sunt duae res realiter differentes" (*Theoremata de Esse et Essentia*, XIX; ed. Hocedez, p. 134, ll. 11-13). So, for Suarez, matter and form are regarded; cf. text *infra*, n. 41.

<sup>38</sup>"Multo probabilior sententia est et ad rem theologiam magis accommodata, quod esse realiter tanquam res a re distinguitur ab essentia" (Bañez, *In ST* I, 3, 4; Urbano, I, 147a).

<sup>39</sup>"Primum, quia praedicata essentialia conveniunt creaturae absque interventu causae efficientis; propter hoc enim ab aeterno fuit verum dicere, hominem esse animal rationale; sed existentia non convenit creaturae, nisi per causam efficien-

"essential being" (*esse essentiae*) and "existential being" (*esse existentiae*). The problem treated was, accordingly, whether essential being and existential being were one and the same thing (*res*), or whether they were two different realities (*res*) apart from any consideration of the human intellect. Understood in this way, the question of the distinction between the two became a standard problem in the quodlibetal literature of the epoch; and for a considerable time opinion seems to have been equally divided regarding the side of the controversy on which the doctrine contained in the Thomistic texts should be ranged.<sup>86</sup>

Against this historical background, then, Suarez is representing the "first opinion" as teaching that existence or existential being is a certain thing (*res*) which is really distinct from the entity of the essence. He is apparently conceiving existence as a *thing*. If the English word "thing" seems a bit too harsh to translate *res* in this context, "reality" may perhaps better convey the notion involved.<sup>87</sup> In any case, Suarez is expressing himself as though created existence can be conceived by itself as a reality, and the question can be asked whether such a reality is really different from the entity of the essence. This would show that he is likewise conceiving essence, or essential being, as a reality in its own right, and allowing in a similar way the question to be asked whether it is the same reality or a different reality from existence.

Is Suarez then not only using the expressions but also actually conceiving the terms of this problem in the way those terms had been understood in the controversy that dates from the time of Henry and Giles, and as they were conceived in his own immediate background, for instance, by Bañez?<sup>88</sup> The answer to this query has to emerge from the way in which Suarez understands the arguments used for and against a real or modal distinction between the two.

The first argument which Suarez reports as offered in favor of a real distinction is that the essential predicates belong to a creature without any intervention on the part of an efficient cause. This is claimed to show that "the being of a creature is a reality (*res*) distinct from its essence, because one and the same reality (*una et eadem res*) cannot be and not be through an efficient cause."<sup>89</sup> The essence is here pre-

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sented as a reality which has its predicates independently of an efficient cause. It therefore should not be the same reality as that which has being only through efficient causality. Each is understood, clearly, as a reality.

Similarly, the second argument reported is that the being of a creature, because received, has to be a reality (*res*) distinct from the essence, because the same reality cannot be received in itself.<sup>40</sup> Here again, the essence is represented as a reality which would have to receive in itself another reality, the existence. Again, each term is evidently taken as a reality.

The fourth argument concludes that existence is a reality distinct (*res distincta*) from the whole essence, for it is a simple *entity* and so cannot be the same reality (*eadem res*) as something composed of two distinct realities (*cum re composita ex rebus distinctis*). As a simple entity it has to be a reality entirely distinct (*res omnino distincta*) from such a composite essence.<sup>41</sup> In this argument existence is looked upon as an *entity* distinct from the *entity* of the essence as

tem, et ideo non potest creatura dici actu esse, nisi facta sit; ergo esse creaturae est res distincta ab essentia ejus, quia non potest una et eadem res esse, et non esse per efficientem causam" (*Dis. Metaphys.*, xxxi, 1, 4; Vives, xxvi, 225b).

The history of the first two arguments cited by Suarez for the real distinction may be found in N. Wells, "Distinction of Essence and Existence in the Philosophy of Suarez," pp. 5-50. Dr. Wells's conclusion (*ibid.*, p. 50) is that Suarez's presentation of the two arguments is in substance faithful to the way in which they are used by the authors whom he lists.

<sup>40</sup>"Secundo argumentor, quia esse creaturae est esse receptum in aliquo; ergo in essentia, non enim potest excogitari aliud in quo recipiatur; ergo est res distincta ab essentia, non enim potest eadem res in seipsa recipi" (*Dis. Metaphys.*, xxxi, 5; Vives, xxvi, 225b).

<sup>41</sup>"Quarto, in substantia composita ex materia et forma, esse est quid distinctum a materia et a forma, et a natura composita ex utraque; ergo est res distincta a tota essentia talis substantiae . . . non potest simplex entitas esse eadem res cum re composita ex rebus distinctis . . .

oportet ut sit res omnino distincta a tali essentia" (*ibid.*, 1, 7; 226ab).

<sup>42</sup>"Secunda sententia est, esse creatum distingui quidem ex natura rei, seu (ut alii loquuntur) formaliter, ab essentia cujus est esse, et non esse propriam entitatem omnino realiter distinctam ab entitate essentiae, sed modum ejus" (*ibid.*, 1, 11, 227b).

<sup>43</sup>" . . . hactenus enim factum non est, nec verisimile est fieri posse ut conservetur existentia albedinis non conservata albedine, et homo habeat existentiam albi, et non sit albus, et sic de aliis . . ." (*ibid.*, 228a).

<sup>44</sup>" . . . ideo existimo non loqui consequenter, qui priorem distinctionem negando hanc admittunt in praesenti materia" (*ibid.*, 6, 9; 244b). Cf. texts *infra*, nn. 79 and 80.

<sup>45</sup>Suarez cannot see existence as merely a *quo* and not in some way a *quod*. " . . . sed solum esse quo aliud est. Sed hoc potius est vocibus ludere, quam difficultatem solvere; nam, licet existentia non dicatur esse vel existere tanquam suppositum, quod propriissime est, tamen non est dubium quin, generalius loquendo, ita vere existat, sicut existunt accidentia, vel partes, et alia entia incompleta" (*ibid.*, 6,



mentioned in the formulation of this "first opinion." These entities are presented as two different realities somewhat as matter and form are considered to be two distinct realities. Both terms, accordingly, are only too obviously looked upon as realities. The other arguments listed, though in no way adverse to this interpretation of the distinction's terms, do not articulate the conception of opposed realities.

With regard to the "second opinion," that of the modal distinction, Suarez is rather brief. He describes it as asserting that created being "is not a proper entity really distinct in the full sense from the entity of the essence, but is its mode."<sup>43</sup> He conceives this position, accordingly, as taking for granted that the essence has its own proper entity, which is distinguished from existence not as one entity from another entity properly so called, but as an entity from a mode. The composition of entity and mode, nevertheless, seems still to be conceived as a composition between two different realities. It allows one to speak about the existence as something which might be thought of as conserved without its essence, even though such an eventuality has never occurred and is not likely to be even possible.<sup>44</sup> In such a way of speaking, quite apparently, one conceives the existence as a reality in its own right and can ask the question whether such a reality could be conserved alone, even though a negative answer is given. Suarez, in fact, cannot see how anyone can consistently deny a *real* distinction between essence and being and still maintain a modal one.<sup>45</sup>

This way of understanding the arguments for a real or a modal distinction between essence and being shows therefore that both terms in the problem are in fact looked upon as realities and, at least in the treatment of the "first opinion," as entities. It is not at all a question of a distinction between existence and an essence which has no entity and is not a reality when considered in contradistinction to existence. The first term, essence, is not regarded as literally a nothing in itself when contrasted with its being. Somewhat similarly the second term, created existence, is viewed as a reality in its own right, as though in itself it were something which can either exist or not exist.<sup>46</sup> The terms of the distinction, then, essential being and existential being, are each presented as a true reality, even when one is placed in contrast to the other.

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This notion of "reality" (*res*), accordingly, can hardly help implying the character of actuality in both essential and existential being, since for Suarez what is truly real is actual. The terms are as a matter of fact explained as actual by Suarez as he introduces the "third opinion," the view which he himself holds to be entirely true. This view is that actual essence and actual existence are not distinguished in reality, although essence conceived abstractly and with precision, as it is in potency, is distinct from actual existence as a nonbeing from a being.<sup>46</sup>

12; 245b). It would be hard to find a more blunt expression of a radically essentialist conception of being. Cf. St. Thomas: ". . . sicut esse rei dicitur ens; non quia ejus sit aliquid aliud esse; sed quia per hoc esse res esse dicitur . . ." (*De Ver.*, q. 5, a. 5 ad 8; ed. Mandonnet, I, 521a). ". . . nec materia nec forma potest dici quod est, nec etiam ipsum esse" (*CG*, II, cap. 54; ed. Leonine, XIII, 392a26-28).

<sup>46</sup>"Haec opinio tertia sic explicanda est, ut comparatio fiat inter actualement existentiam, quam vocant esse in actu exercito, et actualement essentiam existentem. Et sic affirmat haec sententia existentiam et essentiam non distingui in re ipsa, licet essentia, abstracte et praecise concepta, ut est in potentia, distinguatur ab existentia actuali, tanquam non ens ab ente. Et hanc sententiam sic explicatam existimo esse omnino veram" (*Dis. Metaphys.*, XXXI, 1, 13; Vives, xxvi, 228b).

<sup>47</sup>"Ejusque fundamentum breviter est, quia non potest res aliqua intrinsece ac formaliter constitui in ratione entis realis et actualis, per aliud distinctum ab ipsa, quia, hoc ipso quod distinguitur unum ab alio, tanquam ens ab ente, utrumque habet quod sit ens, ut condistinctum ab alio, et consequenter non per illud formaliter et intrinsece" (*ibid.*).

<sup>48</sup>Cf. texts *supra*, nn. 21 and 23.

<sup>49</sup>"Principio statuendum est, essentiam creaturae, seu creaturam de se, et priusquam a Deo fiat, nullum habere in se verum esse reale, et in hoc sensu, praecise esse existentiae, essentiam non esse rem aliquam, sed omnino esse nihil" (*Dis. Metaphys.*, XXXI, 2, 1; Vives, xxvi, 229a).

Suarez, however, citing Cajetan, acknowledges another sense of "real," which is not its proper sense: ". . . ens reale dupliciter accipi: uno modo, ut distinguitur contra ens fabricatum ab intellectu (quod proprie est ens rationis); alio modo, ut distinguitur contra existens actu. Essentia ergo creaturae secundum se est ens reale primo modo, scilicet, in potentia, non vero posteriori modo, et in actu, quod est proprie esse ens reale. . . ." (*ibid.*, 2, 10; 232a). Cf. *ibid.*, II, 6-7; Vives, xxv, 89-90.

<sup>50</sup>". . . esse, quod appellant essentiae ante effectiorem, seu creationem divinam, solum est esse potentiale objectivum (ut multi loquuntur, de quo statim), seu per denominationem extrinsecam a potentia Dei, et non repugnantiam ex parte essentiae creabilis (*ibid.*, XXXI, 2, 2; Vives xxvi, 230a). For Suarez, the cognitional existence of a potential essence means the actual being not of something real but of an *ens rationis*. "Quocirca, si essentia creaturae praecise ac secundum se sumpta, et nondum facta, consideretur ut actu ens, vel ei tribuatur actu esse, sic vel non est consideranda in se, sed in sua causa, nec habet aliud esse reale ab esse suae causae; vel si consideretur ac in se habens esse, sic verum est, secundum eam considerationem, non esse ens reale, sed rationis, quia non est in se, sed objective tantum in intellectu" (*ibid.*, 2, 10; 232a).

<sup>51</sup>". . . fatendum ergo necessario est, seclusa entitate existentiae, quae per effectiorem aliquam communicatur creaturae, ipsam entitatem essentiae omnino nihil esse" (*ibid.*, 2, 5; 230b).

#### IV. The Terms as Actual

The essence, then, may be conceived abstractly and with precision. This essence, as in potency, is now distinguished from *actual* existence as a nonbeing from a being. The second term, existence, when *actual*, is therefore looked upon as *a* being (*ens*). With existence so regarded, Suarez lays down as his *fundamental norm* that a thing cannot be formally and intrinsically constituted as a real and actual being by something distinct from itself, for in this way the two would be distinguished from each other as one being from another being (*tamquam ens ab ente*). Each is already a being (*ens*); and therefore neither can be constituted a being, formally and intrinsically, by the other.<sup>47</sup>

This reasoning means that once something has actuality, it is a being. It is no longer a nonbeing *conceived* as a being. It does not need anything else, and cannot allow anything else, to constitute it as a being, since it already is just that. Accordingly, the Suarezian notion of actuality and its relation to being requires close examination. It is, in fact, given careful and detailed treatment by Suarez himself in explaining the view which he has undertaken to defend.

Essential being, he had insisted when introducing the notion,<sup>48</sup> does not of itself mean actual being. Of itself it prescind from actual being. This is now explained in greater detail. The essence of a creature, before it is produced by God, has in itself no true or real being. As such it is not a thing; it is altogether nothing.<sup>49</sup> Essential being, before its production in reality, is therefore only objective potential being (*esse. potentiale objectivum*).<sup>50</sup> Without its existential entity, the essential entity in itself is entirely nothing.<sup>51</sup>

Accordingly, essential being can be taken as either actual or potential. As actual, it is never found apart from *real* existence. As potential, it is not a reality (*res*). As potential, therefore, it cannot be expected to form the first term of the distinction between essence and being, for this is a distinction between two realities, as the history of the controversy has established. Suarez does not show the least hesitation here, for he does not appear to see any reason for going outside the confines of the definite historical controversy. The first

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term of the distinction, therefore, has to be actual essential being. It will be the essential entity which is found joined to existential entity and never separate from it.

In a Christian background Suarez shows without difficulty that no creature can be *real* unless it has been freely produced by God. So

<sup>52</sup>"Nec potuit in mentem alicujus Doctoris Catholici venire, quod essentia creaturae ex se, et absque efficientia libera Dei, sit aliqua vera res, aliquod verum esse reale habens distinctum ab esse Dei. . . . quia solus Deus est ens ex se necessarium, et sine illo factum est nihil, et sine effectione ejus nihil est, aut aliquod esse reale in se habet. . . . Et similiter non creasset Deus omnia ex nihilo, sed ex uno esse transmutasset illa ad aliud esse" (*ibid.*, 2, 3; 230a). Cf.: ". . . quod est simpliciter et omnino nihil, non potest vere et realiter esse aliquid in aliqua ratione veri entis" (*ibid.*, 4; 230b).

<sup>53</sup>*Ibid.*, 2, 6-11; 230b-32b. Cf.: ". . . non requirit in illis aliquod esse reale, ut terminent hujusmodi scientiam, sed sufficit esse potentiale, quod ut sic solum est actu in causa. . . ." (*ibid.*, 7; 231a). ". . . ab aeterno non fuisse veritatem in illis propositionibus, nisi quatenus erant objective in mente divina, quia subjective seu realiter non erant in se, neque objective in alio intellectu" (*ibid.*, 8; 231b).

<sup>54</sup>Cf. texts *supra*, nn. 23 and 50.

<sup>55</sup>". . . in rebus creatis ens in potentia et in actu immediate ac formaliter distinguuntur tanquam ens et non ens simpliciter. Quae distinctio ab aliquibus vocatur realis negativa, quia unum extremum est vera res, et non aliud; ab aliis vero vocatur distinctio rationis, quia non sunt duae res, sed una tantum, quae per intellectum concipitur, et comparatur ac si essent duae" (*Dis. Metaphys.*, xxxi, 3, 1; Vives, xxvi, 233a). Suarez later makes these two designations for the distinction his own (cf. text *infra*, n. 97).

<sup>56</sup>". . . illud esse in potentia, seu illa potentia objectiva non possit esse res aliqua vera et positiva in ipsa re, quae in potentia esse dicitur. . . . hoc esse in potentia objectiva nullam dicit potentiam realem et positivam, quae actu sit. . . . Tertio, supra ostensum est, in essentia possibili priusquam fiat, nihil rei esse (proprie

loquendo de re positiva et actuali); ergo non potest in ea esse potentia realis positiva; omnis enim potentia realis positiva, est res aliqua vera, seu in aliqua realitate et entitate fundata" (*ibid.*, 3, 3; 233b).

<sup>57</sup>"Si vero illa potentia manet in re producta, jam illa potentia non est objectiva tantum, sed etiam subjectiva, nec res fierent ex nihilo, sed ex praesupposita potentia, tanquam ex subjecto, vel materia ex qua fit res" (*ibid.*). "Neque illa potentia respectu cuius dicuntur esse in potentia objectiva, potest esse aliquid in ipsis, sed in causa a qua fieri possunt, quia esse in potentia objectiva, nihil aliud est quam posse objici alicui potentiae. . . . dicitur ergo esse in potentia objectiva in ordine ad alterius potentiam, et per denominationem ab illa dicitur res possibilis" (*ibid.*, 4; 233-234). ". . . cum res creatur, desinit esse in potentia, non quia desinat esse subjecta divinae potentiae, et contenta in illa, sed quia jam non est tantum in illa, sed etiam ab illa, et in seipsa. Hunc ergo statum excludebat illud in potentia" (*ibid.*; 234a).

This metaphysical conception of the non-reality of the merely possible cannot avoid running into insuperable difficulties in explaining how the same thing can acquire both cognitional and real being. Suarez can propose only a negative identity which is represented by human cognition after the manner of a positive identity. "Cum ergo dicitur res possibilis, et facta, esse eadem numero vel specie, si sit sermo de identitate reali, seu positiva, falsum est, quia haec non est nisi inter extrema positiva et realia; negative autem dicuntur esse una res, vel unius speciei, quia res producibilis et producta non sunt duae res, sed una, neque habent duas species, aut duas essentias, sed unam; haec autem unitas seu identitas negativa apprehenditur a nobis ad modum positivae, quia comparamus rem positivam objective existentem in intellectu ad rem actu existentem,



apart from its being placed in existence by God, it cannot have any real being.<sup>52</sup> The objections against this doctrine are unimportant and arise in general from the notion that the possibles have their own objective truth, with all truth founded on being. Such objections are easily answered by showing that the essences have this truth only insofar as they are in some intellect and not because of any real actual being in themselves.<sup>53</sup>

The force of the term "objective" is clear enough from this explanation. It denotes the essence as an object of the intellect or of a productive faculty. This status of the essence as merely an object of intellectual consideration but without actual existence in reality Suarez calls essential *being*; not actual essential being, but potential or possible essential being. Such being is cognitional being or a being of reason,<sup>54</sup> as distinguished from real being. Though it is called essential *being* (*esse*), it is not *a* being (*ens*). In this doctrine, evidently, *being* (*esse*) is not sufficient in itself to constitute anything *a* being (*ens*). On the other hand, Suarez would require that the essential and existential constituent of a real thing be each in itself *a* being (*ens*). He does not allow any place for a metaphysics in which neither the essence nor the existence of a creature is in any proper sense *a* being.

The next step in the Suarezian procedure is to show that potential essential being and actual essential being differ simply as a nonbeing and a being (*tanquam ens et non ens simpliciter*). Such a distinction, Suarez reports, is called by some a real negative distinction, because one of its terms is not truly a thing; while by others it is named a distinction of reason because in it the one thing concerned is conceived by the intellect as though there were two things involved. Suarez, to judge by the way he writes, accepts both ways of characterizing the one and the same distinction.<sup>55</sup>

The distinction is readily established. The potential being, or objective potency, which constitutes potential essence, cannot, as has just been shown, be any true and positive reality (*res*) in the thing itself (*in ipsa re*). Therefore it does not denote any real and positive potency, which would of course be actual.<sup>56</sup> It does not remain in a thing once the thing is produced in reality.<sup>57</sup> Such potential being,

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therefore, does not denote the positive mode or status of a being.<sup>58</sup> Essence in this potential state has no entity at all. It cannot with propriety be conceived as the potency to which the existence is declared to be added in order to constitute a being or an actual essence (*ens aut essentiam in actu*). For how could an act be impressed upon that which is nothing?<sup>59</sup>

Possible essential being is therefore *not* the *receptive* potency of existence. It is distinguished from actual essential being because it is in itself a nonbeing. In other words, though called being (*esse*), it is simply nothing. A receptive or subjective potency, on the contrary, is, according to these texts, something which in itself is real, positive, and actual, something which is truly a thing. As the matter or subject of an act, it has all these characteristics, characteristics which are excluded from objective potency. The objective potency therefore is not the potency which receives existence. It cannot be the subject of

ac si essent duo extrema positiva, cum tamen reipsa non sint nisi unum. . . ." (*ibid.*, 2, 9; 232a). The thing which is known, accordingly, is not the same positive reality which actually exists. Such a doctrine could hardly help developing into the Cartesian separation of ideas from things.

<sup>58</sup>"Relinquitur ergo, ens in potentia ut sic, non dicere statum aut modum positivum entis, sed potius praeter denominationem a potentia agentis includere negationem, scilicet, quod nondum actu prodierit a tali potentia . . ." (*ibid.*, 3, 4; 234a). The inclusion of the negation in the concept of potential being is here explicit.

<sup>59</sup>"Nam, si sit sermo de essentia in actu respectu essentiae in potentia, minus proprie dici videtur addere illi existentiam, quia additio realis non fit proprie, nisi enti reali, nam aliquid entitatis habet cui additio fit; diximus autem essentiam in potentia nihil habere entitatis . . . quo modo enim potest actu imprimi ei quod nihil est?" (*ibid.*, 3, 5; 234ab). Cf. text *supra*, n. 4.

<sup>60</sup>"Ex hoc tamen necessario sequitur, quamvis essentia actualis non differat a potentiali nisi dum est, vel etiam quia est sub actu essendi, formaliter tamen ac praecise non differre immediate in actu essendi,

sed in sua entitate essentiali, seu in esse essentiae actualis. . . . sed essentia actualis in esse essentiae differt ab essentia in potentia, ut per se notum est, et non differt formaliter ac praecise per existentiam, sed per actualitatem illam quam in se habet, ab existentia distinctam, quia illam actu non habebat dum erat in potentia . . ." (*ibid.*, 3, 6; 234b). "Et consequenter etiam est verum, essentiam, prout actuale ens, distingui immediate ab essentia potentiali per suammet entitatem actualem, sive ad habendam illam requirat aliam entitatem, vel alium modum, sive non . . ." (*ibid.*, 8; 235a).

<sup>61</sup>"Unde, ut formaliter loquamur, et abstrahamus ab omni opinione, non est dicendum, essentiam actualem distingui a potentiali, quia habet existentiam; nam . . . formalissime et immediate in omni sententia separatur essentia actualis a potentiali, per suammet entitatem actualem, quam habet in ratione essentiae realis" (*ibid.*).

<sup>62</sup>" . . . ergo esse essentiae actualis non distinguitur ex natura rei ab actuali essentia, aliqui in infinitum procederetur; ergo in omni opinione illud esse, quo constituitur essentia actualis, ut sic, non potest esse distinctum ex natura rei ab ipsa" (*ibid.*, 4, 3; 235b).

existential act. The objective potency is not found in the things themselves but in the faculty of which it is the object. As such it expressly includes a negation. It is the possibility of a thing *not* yet produced. Accordingly it cannot be really and positively identified with anything in the actually existing thing.

Actual essential being, on the other hand, is an actual entity. It differs from potential essence, therefore, formally and precisely, by the actuality which it has in itself and which in this problem is contrasted with existence. The difference lies within the order of essence. This, Suarez considers, is immediately evident in itself.<sup>80</sup> No matter what opinion one follows in the general problem, one has to say that, formally and immediately, actual essence is distinguished from potential essence, not because it has existence, but by its own actual entity which it has in its status of real essence.<sup>81</sup> This actual entity is real being, being which does not enter into composition with it but is in every way identical with it in reality, as every opinion, Suarez claims, must admit. Any real distinction here would give rise to an infinite regress.<sup>82</sup> The proper entity of actual essence, entity which is entirely in the line of essence as essence is distinguished from existence, is accordingly what constitutes essential being a *thing* or a *reality* and so makes it the first term of the distinction between essence and being.

One may well pause here and ask just what is involved in this doctrine. To judge from the care with which Suarez develops it, it seems to be the crucial point in the whole problem. If the centuries-old controversy concerns a distinction between two realities (*res*) and if actual essential entity is what constitutes essential being a reality, certainly the whole issue centers around the question of what makes the created essence actual, in the most basic and formal sense.

First, Suarez quite evidently has not the slightest notion that there ever existed historically a doctrine which placed the real distinction between the essence itself and the first basic actuality of that essence. He is not aware that any metaphysics has ever shown that the finite essence is really different from its being, whether such being be called essential or existential. He is not interested in a problem in which every aspect of being remains firmly on the "existence" side of the distinction and in which the first term, essence, of itself contains no



being of any kind whatever. Rather, Suarez remains within the framework of a controversy in which both terms are represented as of themselves containing being. Both are represented as actual, and so both are understood as realities. Suarez is evidently opposing a doctrine which, as in Giles of Rome,<sup>83</sup> presumes that the essence has its own actuality but that such essential actuality is not sufficient in itself to make the essence exist. The point at issue is whether these two terms are in reality the same kind of being (*esse*), the same actuality, the same reality (*res*), or whether they are outside the mind two different kinds of being, two different actualities, two different realities.

<sup>83</sup>"... illa tamen actualitas quam importat essentia non est tanta quod sufficiat ad hoc quod essentia existat . . ." (*Theoremata*, v; ed. Hocedez, p. 21, ll. 12-14). "Dicemus ergo quod essentia angeli non est tantae actualitatis quod possit actu existere nisi a Primo agente detur ei actualitas aliqua essentiam ipsam complens et perficiens, quae actualitas communi nomine dicitur esse" (*ibid.*, xix; p. 130, ll. 8-11).

<sup>84</sup>"... formaliter tamen et intrinsece non differt existentia actualis a seipsa potentiali per essentiam, sed per suam actualem entitatem, quam actu non habebat, dum erat in potentia . . ." (*Dis. Metaphys.*, xxxi, 3, 7; Vives, xxvi, 235a). "Cumque ipsamet entitas existentiae possit esse interdum in potentia, interdum in actu, et consequenter etiam de illa necesse sit fateri, non esse de essentia ejus actu existere, neque actu constituere rem existentem. . . ." (*ibid.*, 6, 7; 244a). "... esse et non esse extra causas commune est essentiae et existentiae . . ." (*ibid.*, 21; 249a). Suarez's ultimate identification of potential essence with potential existence has to be taken as paralleling his identification of real essence and real existence. "... proportione servata, idem omnino esse existentiam in potentia cum essentia in potentia, et existentiam in actu cum essentia in actu" (*ibid.*, 249b). Cf.: "Suarez spricht . . . selbst von einer möglichen Existenz im Gegensatz zu möglichen Wesenheiten" (M. Rast, "Die Possiblenlehre des Franz Suarez," *Scholastik*, x [1935], 342).

Suarez acknowledges that "existence" in

the strict sense of the word denotes only actuality, but in his own usage extends it also to the potential sense. "Haec enim vox, *existentia*, in rigore non significat existentiam (ut aiunt) in actu signato, seu ut conceptum et in potentia tantum . . . sed significat illam solum in actu exercito, seu ut actualem . . . Si vero nomen existentiae extendatur ad eam, quae est tantum in potentia seu objective . . ." (*Dis. Metaphys.*, xxxi, 6, 21; Vives, xxvi, 249b).

<sup>85</sup>"Similiter, non solum essentia praecise, et existentia praecise, sed etiam totum compositum ex esse et essentia, potest a nobis concipi, ut in potentia, et in actu, ut per se notum est; hoc autem ens in actu non distinguitur adaequate a seipso in potentia, quia addit existentiam essentiae; nam in utroque statu includit existentiam proportionate . . ." (*ibid.*, 3, 7; 235a).

<sup>86</sup>For example, Henry of Ghent (cf. text *supra*, n. 17). Capreolus: "... essentia creaturae non est realiter ipsum suum esse actualis existentiae" (*Defensiones*, In I Sent., d. 8, q. 1, a. 1; ed. Paban-Pégués, I, 311). Cajetan: "... an esse actualis existentiae et essentia distinguantur realiter" (*In De Ente et Essentia*, cap. 5; ed. H. H. Laurent, p. 153 no. 97). In St. Thomas Aquinas this situation could hardly arise, since there is no higher act than being: "... esse est actualitas omnium actuum, et propter hoc est perfectio omnium perfectionum" (*De Pot.*, q. 7, a. 2 ad 9; Mandonnet, II, 254a). "... esse est actualitas omnis formae vel naturae" (*ST*, I, q. 3, a. 4).

<sup>87</sup>Cf. texts *supra*, nn. 52 and 57.



Such is the way in which the problem appears, without any doubt at all, after the foregoing Suarezian treatment of the actual entity of essence.

Secondly, "being" (*esse*) is only too evidently looked upon as something that can be either actual or potential. It is not regarded as of its very nature the actuality of all actualities. Rather, essential *being* can be considered as merely potential. Similarly, the other term of the distinction, "existence," taken just by itself, can be either potential or actual.<sup>64</sup> In accordance with this doctrine, the composite of the two when represented as in potency is conceived as having existence, though the merely potential kind which is different from actual existence.<sup>65</sup> Little wonder, then, that Suarez, like his predecessors in the controversy,<sup>66</sup> has to insist on the notion of *actual* existential being! Even existential being, let alone the more general notion which extends to both essential and existential being, does not *of itself* denote any actuality! The extreme bearing of the conception of existence as a "thing" (*res*) becomes evident from these considerations. A sensible thing may be conceived as either actually or potentially existent. So also can existence itself, as contrasted with essence, be looked upon as either actual or potential!

Thirdly, just what is an essence which is not a receptive potency for existence? Potential essential being is expressly, in this doctrine, not a receptive potency. It can function as the object of a faculty, but as such it cannot receive existence. It is not the subject which actually exists. If it were, creation would be impossible, for the subject would be presupposed to the creative act.<sup>67</sup>

Is not all this an attempt to submit both the medieval notions of essence and being to an over-all doctrine of act and potency? What constitutes a being is expressed by "actuality" and not by "existence" or "being." Created existence, in fact, can be conceived as potential and so as an existence which is a nonbeing. Potential existence is here not presented as essence, nor is it understood as constituted by anything in the line of essence. Under the aspect of existence it can be merely potential. Existence, moreover, is constituted a being by its *actual* entity, entity which it did not have when it was in potency. It is not existence, then, which formally makes the difference between a being

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and a nonbeing, but rather actuality, which forms a notion common to both essence and existence.<sup>68</sup> On the other hand a potential essence, which is in itself actually a nothing, cannot be the subject of actual existence. It cannot receive actual existential being, for a nothing cannot receive an act. The essence which actually exists, accordingly, is conceived as a reality, a thing, an actual being, in its own right, and so as distinct *within the order of essence* from the objective potency which never does actually exist. Just as a thing like a tree or a stone can be conceived as a nonbeing before it existed and as a being when it exists, so essence and existence can each be conceived as potential and as actual. It is the proper actuality of each in its own respective order that formally constitutes the difference in all cases between a being and a nonbeing. Such is the full force of the Suarezian conception of essence and existence as things or realities (*res*). Essence is no longer simply a potency to being, and existence is no longer of its very nature actual. Like any other "things," these two, each entirely within its own order, can be considered either as actual or as potential.

Finally, from these tenets there emerges the answer to the puzzling question of how Suarez can say that potential essential *being* is in itself entirely nothing. It is being (*esse*) and yet is a nonbeing (*ens*). The answer is that for Suarez being (*esse*) is not what constitutes the essence a being. What constitutes it a being is actuality. Consequent-

<sup>68</sup>Cf. texts *supra*, n. 64. "That is why it is a mistake to treat the problem of essence and existence as an instance of a more general distinction of potency and act . . ." (D. J. B. Hawkins, *Being and Becoming* [New York: Sheed and Ward, 1954], p. 105).

<sup>69</sup>"Imo, si consequenter loquantur, non video qua ratione possint eam admittere" (*Dis. Metaphys.*, xxxi, 4, 4; Vives, xxvi, 236a). Suarez can form no notion of an actually existent essence which has *all* its actuality from an act which is other than itself.

<sup>70</sup>"Dico tertio: illud esse, quo essentia creaturae formaliter constituitur in actualitate essentiae, est verum existentiae. . . . Primo, quia hoc esse praecise sump-tum satis est ad veritatem hujus locutionis de secundo adjacentis, *Essentia est*; ergo

illud esse est vera existentia. . . . Secundo . . . nam huic esse actualis essentiae conveniunt omnia quae tribui solent existentiae . . . ergo est verum esse existentiae. . . . primo hoc esse essentiae actualis non est aeternum, sed temporale . . . Deinde, hoc esse convenit creaturae contingenter. . . . Est ergo hoc verum esse existentiae. Tertio declaratur hoc ipsum ex propria ratione existentiae; nam esse existentiae nihil aliud est quam illud esse, quo formaliter et immediate entitas aliqua constituitur extra causas suas, et desinit esse nihil, ac incipit esse aliquid; sed hujusmodi est hoc esse, quo formaliter et immediate constituitur res in actualitate essentiae; ergo est verum esse existentiae" (*ibid.*, 4, 4-6; 235b-36b).

<sup>71</sup>Cf. text *supra*, n. 55.

ly, when Suarez states that essence just in itself and as potential is altogether nothing, he is not at all implying that as such it is devoid of being (*esse*). It is still essential *being*.

## V. The Terms Which Are Really Identical

With the terms of the problem established unambiguously as realities (*res*), each of which may be in itself considered either as actual or as potential, and with the criterion of actuality accepted as the formally constitutive mark of *a* being, Suarez has little trouble in showing that actual essential being is truly existential being. He even admits that he cannot see how any one who asserts a real distinction can consistently maintain that the being which formally makes the essence actual is existential being!<sup>10</sup> He argues simply and straightforwardly. First, actual essential being, precisely in itself, suffices for the truth of the statement "The essence is"; such being, therefore, is true existence, for "is" in such a case, according to the common conception of mankind, means temporal and actual being in reality, which everyone understands as existence or existential being. Secondly, actual essential being has all the characteristics which are usually attributed to existence, including temporality and contingency, for creatures have no eternally actual and real being but only eternal potential being; therefore their actual essential being is true existential being. Finally, to start with the notion of existence, existential being is that kind of being by which any entity is constituted, formally and immediately, outside its causes and outside nothingness; but that is just what actual essential being does; therefore actual essential being is true existential being.<sup>10</sup>

The probative force of each of these three arguments lies in the notion that the constitutive of a being is actuality as such, the notion which has already been so carefully explained. In the first argument, this conception shows that actual essential being, precisely as such, makes the essence *a* being and distinguishes it from a potential being; and, as Suarez had shown,<sup>11</sup> an actual being and a potential being are formally and immediately distinguished as a being and a nonbeing. In the second argument, the actual essential being of creatures is

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established as temporal and contingent, in contradistinction to their potential essential being; so this actuality, considered entirely in the line of essence, is what makes a thing exist; in other words, it is what formally constitutes as a being what previously was nothing. In the third and final argument, an actual being is shown to be the same as an existent being, on account of the immediate and formal opposition which has been established between actual being and potential being; and since actual essential being constitutes the essence as actual, it thereby constitutes it as existent.

Given their starting-points, these arguments are flawless. They show

<sup>72</sup>"Item ex immediata et formali oppositione supra declarata inter ens actu, et ens in potentia . . . ergo illud esse, quo formaliter constituitur ens actu in se et extra causas, est etiam esse quo constituitur existens; ergo illud esse est verum esse existentiae" (*Dis. Metaphys.*, xxxi, 4, 6; Vives, xxvi, 237a). "Non est ergo in una re nisi unum esse quo constituitur ens actu, et illud ipsum est esse existentiae" (*ibid.*, 5, 15; 241b).

In the authentic texts of St. Thomas Aquinas, there is nothing against identifying existence, both really and conceptually, with the being which formally and immediately makes the essence actual, though of course there would be serious objection to calling that existence, considered just in itself, a reality. On this latter point, cf.: "For there is only one thing (*res*), composed though it may be on the metaphysical level of principles of being and of limitation." (Hawkins, *Being and Becoming*, p. 44).

<sup>73</sup>"Dicendum est enim primo, essentiam creatam in actu extra causas constitutam non distingui realiter ab existentia, ita ut sint duae res seu entitates distinctae" (*Dis. Metaphys.*, xxxi, 6, 1; Vives, xxvi, 241b).

<sup>74</sup>" . . . ubique ait ens adjunctum rebus nihil eis addere; . . . nihil addit rei seu essentiae actuali, ex sententia Aristotelis . . ." (*ibid.*; 242a).

<sup>75</sup>" . . . talis entitas, addita actuali essentiae, nec potest illi formaliter conferre primam (ut ita dicam) actualitatem seu primam rationem entis in actu, qua separatur et distinguitur ab ente in potentia; neque etiam potest esse necessaria . . ."

(*ibid.*, 2).

<sup>76</sup>"Et hinc satis etiam constat, hujusmodi entitatem vel modum esse superfluum. . . . Non enim esse potest, ut essentia fiat ens actuale, et extra causas constitutur; hoc enim formaliter habet per esse essentiae actuale, ut saepe probavimus. . . ." (*ibid.*, 5, 11; 240a). "Sic ergo aperte constat, entitatem existentiae distinctam ab entitate essentiae non posse requiri ut intrinsece constituat ipsam entitatem essentiae in sua propria actualitate" (*ibid.*, 6, 3; 242b).

<sup>77</sup>"Atque hinc ulterius inferimus, hujusmodi entitatem existentiae dicto modo distinctam, non solum superfluum esse, sed plane impossibilem. . . . hic autem nullus est effectus formalis quem talis entitas dare possit" (*ibid.*, 5, 12; 240b). "Primum autem membrum partitionis positae, et admittitur ab omnibus auctoribus, etiam ab illis qui existentiam ab essentia realiter distinguunt; et est plane evidens ex ipsa fere terminorum declaratione, jam satis tradita in suppositionibus positis; repugnat enim entitatem constitui in esse entitatis per aliquid a se distinctum" (*ibid.*, 6, 2; 242a).

<sup>78</sup>" . . . concludimus, ens actu, et existens, eandem rem et rationem formalem significare: ideoque fingi non posse esse existentiae, distinctum ab illo esse, quo unaquaeque res in actualitate suae essentiae constituitur" (*ibid.*, 5, 11; 240b).

<sup>79</sup>"Addimus vero ulterius, praeter hoc esse existentiae, nullum aliud esse necessarium ut res existat, quia ipsum esse intrinsecum et entitativum sufficit . . ." (*ibid.*, 6, 11; 245a).



clearly that essential being and existential being are the same reality, whether that reality be called actual essence or actual essential being or actual existential being. In the one real thing, therefore, there is only the one kind of being. This constitutes the thing an actual being, and itself is existential being.<sup>73</sup> Such is the conclusion which follows inevitably from the Suarezian understanding of the terms in this problem.

With the identity of essential being and existential being firmly established, Suarez can now confidently approach the noted historic controversy. He can decide, first, that created essence actually constituted outside its causes is not really distinct from existence, in such a way that they would be two distinct things or entities.<sup>74</sup> Such is the doctrine of Aristotle, who everywhere says that being adds nothing to things in the sense of actual essences.<sup>75</sup> It is especially shown by reason, for the first actuality of a thing constitutes the thing a being and distinguishes it from potential being. But this first actuality is the essence's own essential entity. Therefore any further entity to constitute it a being is both superfluous and impossible.<sup>76</sup> It is superfluous, for essence is already constituted a being outside its causes by its actual essential being, as has been shown so often.<sup>76</sup> It is impossible, because it would be contradictory for an entity to be constituted in entitative being by something distinct from itself.<sup>77</sup> Accordingly, an actual being and an existent signify the same thing and the *same formal aspect (rationem formalem)*. It is therefore impossible to imagine any existential being distinct from the being by which a thing is constituted in the actuality of its essence.<sup>78</sup> In this reasoning, Suarez continues to assume as self-evident and accepted by all, even his opponents, that an entity cannot be constituted in its essential being by anything other than itself.

The same reasons which show that a real distinction between essence and existence is impossible prove likewise that a modal difference cannot be present. The reasons have demonstrated that nothing over and above the actuality of the essence is necessary to make a thing exist, nor could any addition to the essence possibly exercise that function. Such an added mode, just as in the case of an added entity, would be both superfluous<sup>79</sup> and impossible.<sup>80</sup> Again, the real

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being by which the essence is first constituted an actual being is true existential being.<sup>81</sup>

The terms which Suarez finds to be really identical are consequently actual essence on the one hand and actual existence on the other. These, as described in the background of the centuries-old controversy, turn out to be one and the same reality (*res*). There is not the least doubt that *both* terms are here considered as *actual*. The only question that remains is whether the Suarezian arguments have not shown considerably more than just a *real* identity between actual essence and actual existence. If these two have been proven identical in their function and even in their formal aspect, how is any *conceptual* distinction between them at all possible?

## VI. The Terms Which Are Conceptually Distinct

This brings the treatment to Suarez's own positive doctrine. Existence and essence, he maintains, may be distinguished in two ways. First, existence may be looked upon as denoting what is actual, and essence as designating what is potential (that is, in the objective sense). In that case, the distinction between them is the distinction of an actual being from a potential being (*tamquam ens in actu et in potentia*). Secondly, *both* existence and essence may be taken as *actual*. Here the only distinction between them is a distinction of reason with a basis in reality. This positive doctrine is sufficient to

<sup>80</sup>"... ergo ut talis entitas est, non posset intrinsece constitui in tali entitate actuali per illum modum, seu per esse distinctum, ... ergo non potest talis modus, ex natura rei distinctus, esse primum et intrinsecum esse reale constituens actualement entitatem ipsius essentiae ... ." (*ibid.*, 6, 9; 244b).

<sup>81</sup>"Rursus ostendimus, hoc ipsum esse reale, quo essentia primo constituitur ens actu, esse verum esse existentiae ... ." (*ibid.*, 11; 245a).

<sup>82</sup>"Dico tertio, in creaturis existentiam et essentiam distingui, aut tanquam ens in actu et in potentia, aut si utraque actu sumatur, solum distingui ratione cum aliquo fundamento in re, quae distinctio satis erit ut absolute dicamus, non esse de essentia creaturae actu existere" (*ibid.*,

13; 246a).

<sup>83</sup>Cf. texts *supra*, n. 55, and *infra*, n. 97.

<sup>84</sup>"... imperfectio talis entitatis, quae non habet ex se necessitatem, ut sit id quod est, sed solum id habet ex influxu alterius.

"Atque hinc ulterius fit, ut intellectus noster, qui potest praescindere ea quae in re non sunt separata, possit etiam creaturas concipere abstrahendo illas ab actuali existentia, quia, cum non necessario existant, non repugnat concipere earum naturas praescindendo ab efficientia, et consequenter ab actuali existentia. Dum autem sic abstrahuntur, etiam praescinduntur ab actuali entitate essentiae ... ." (*Dis. Metaphys.*, xxxi, 6, 14-15; Vives, xxvi, 246b). On this identification of abstraction and precision, cf. *supra*, n. 21.

justify the absolute assertion that actually to exist is not of a creature's essence.<sup>82</sup>

Suarez, accordingly, is asserting *two* different conceptual distinctions between essence and existence. The first is the conceptual distinction or negative real distinction<sup>83</sup> between a being in act and a being in potency. In this distinction essence is taken as potential, existence as actual. Since Suarez repeatedly contends that both existence and essence may be taken as either actual or potential, he is quite justified within the limits of his own metaphysics in taking for any particular case either one as potential and the other as actual. All that need be noted is that this first Suarezian conceptual distinction is explicitly the distinction between *potential* essence and *actual* existence. It is admittedly not a distinction between the concepts of the same terms whose real identity was established, actual essential being and actual existential being.

The second Suarezian conceptual distinction, however, purports to be that of actual essence from actual existence. It claims to be a conceptual distinction with a basis in reality. That real basis is the imperfection of the essence of a creature which of its own very nature cannot actually exist without the efficient causality of another. Hence the intellect by prescinding is able to conceive creatures in abstraction from that efficient causality and so from actual existence. Though the intellect is thereby prescinding from all actuality, *essential* as well as existential, it is nevertheless conceiving essence in such a way that all the essential predicates are affirmed of it, even though actual entity and actual existence are denied it.<sup>84</sup>

But what notion of essence does this basis in reality give to the first term of a conceptual distinction? Definitely it is not actual essence. It *prescinds* from the actual entity of the essence as well as from actual existence. It excludes from its content actual entity, essential as well as existential. The essence is conceived after the manner of the first constitutive of the thing, which can form an *object* of intellectual conception while prescinding from all actuality. The content of this concept is quite apparently given the status of potential being, for it is made that of something to which actual entity cannot belong as such, is described in terms which give it an objective or cognitional status,

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and is found to be impossible in the case of God since the divine essence cannot be conceived after the manner of a potential being.<sup>85</sup>

On the strength of this description there can hardly be any doubt that the first term of the Suarezian conceptual distinction is not actual essence and so is definitely not the first term that was involved in the Suarezian assertion of the real identity of essence and being. Actual

<sup>85</sup>“... praescindendo ab actuali entitate, aliquid consideretur tanquam omnino intrinsecum et necessarium, et quasi primum constitutum illius rei, quae tali conceptioni obicitur; et hoc vocamus essentiam rei... ipsum actu existere... de facto potest non convenire creaturae prout tali conceptui obicitur. Quae omnia secus contingunt in Deo, quia, cum sit ens ex se necessarium concipi non potest per modum entis potentialis, sed actualis tantum...” (*Dis. Metaphys.*, xxxi, 6, 15; Vives, xxvi, 246-47).

<sup>86</sup>“... non potest actualis entitas ab existentia praescindi, ut supra probatum est (*ibid.*; 246b). Cf.: “Atque ad vim huius rationis, sola praecisio per nostros conceptus sufficit; nam, hoc ipso quod intelligimus entitatem essentiae actualis, factam a Deo, etiamsi non intelligamus illi esse additam aliam entitatem, sufficienter concipimus illam existentem, neque in hoc conceptu objectivo aliquid falsum, aut sibi repugnans includimus...” (*ibid.*, 8; 244a). “... atque ita omne esse actuale, quo essentia in actu separatur ab essentia in potentia, dicetur non esse de essentia creaturae...” (*ibid.*, 14; 246b).

Actual essence and existence are, in fact, described as the same type of actual being. “... tunc actualis entitas essentiae habet proprium et intrinsecum esse actuale, quo est in rerum natura, et extra causas suas. Quid autem aliud est existere, quam ita esse?” (*ibid.*, 4; 243a). The only distinction involved here is that between actual essence and potential essence. It cannot for Suarez be conceived as though one term were the concept of actuality plus essence and the other term, existence, the concept of actuality minus essence; for essence as conceived without actuality, when contrasted with its actuality, becomes for him objective potency,

which cannot properly be conceived as entering into composition with its actuality. The distinction, accordingly, remains that between actual essence and potential essence. “... additio realis non fit proprie, nisi enti reali, nam aliquid entitatis habet cui additio fit; diximus autem essentiam in potentia nihil habere entitatis; non ergo ei fit additio proprie loquendo, nisi fortasse secundum rationem, quatenus essentia in potentia objectiva apprehenditur per modum entis, propriusque diceretur essentiam, ut actu ens, distingui per existentiam actualem a seipsa, ut est in potentia” (*ibid.*, 4, 5; 234a). Existence and essence are the same *thing*, conceived now as actual, now as potential (cf. text *infra*, n. 90).

<sup>87</sup>“... vel loquitur de essentia actuali, seu quae includat veram realitatem essentiae, vel de essentia potentiali. Priori modo plusquam falsum esset dicere, essentiam creaturae non esse a Deo, ut a causa efficiente, ut supra probatum est” (*ibid.*, 6, 17; 247b).

<sup>88</sup>Cf. text *supra*, n. 84.

<sup>89</sup>“... nos distinguimus saltem ratione inter essentiam et existentiam, tanquam inter duo extrema positiva et realia. Dices, concipi quidem illa extrema tanquam positiva et realia, non tamen ut actualia, sed abstrahendo in ea latitudine, in qua ens abstrahit ab ente in actu et in potentia. Sed contra hoc est, quia essentiam sub propria ratione essentiae, non tantum ut potentialem, sed etiam ut actualem concipimus, et sic etiam illam ratione distinguimus ab existentia. Cum enim dicimus rem habere in actu suam essentiam et suam existentiam, non idem bis dicimus; non ergo sunt illae voces synonymae; ergo significata earum saltem ratione distinguuntur...” (*Dis. Metaphys.*, xxxi, 6, 22; Vives, xxvi, 249b).



essential entity, in fact, cannot be prescinded from existence, as Suarez says his arguments have proved.<sup>86</sup> The concept of the actual entity contained in actual essence, therefore, merges in the concept of actual existence and belongs to the *concept* of the *second* term in this conceptual distinction. The distinction is definitely a distinction between a concept of essence which prescinds from essential actuality and a concept which contains both essential and existential actuality. The prescinding line falls between the essence and the actuality of that essence.

Suarez, accordingly, rejects the explanation of Henry of Ghent, which distinguished essence and existence on the ground that essence as such has no reference to the efficient causality of God, whereas existence has such a reference. Suarez cannot subscribe to this doctrine, because actual essence does contain exactly that reference to the divine causality, as he has already shown.<sup>87</sup> The actuality of the essence, therefore, is consistently related to the efficient causality which produces the actual existence; and so the abstraction from such efficient causality is necessarily abstraction from the actuality of the essence. All intrinsic actuality in the essence, consequently, is shifted from the concept of essence as the first term of the Suarezian conceptual distinction to the concept of the second term, for the concept of the first term here expressly prescinds from that efficient causality.<sup>88</sup>

The first term of Suarez's conceptual distinction here is evidently not, in the light of these explanations, the concept of actual essence. Is it then the concept of potential essence, just as it was in the first of his two conceptual distinctions? Suarez has maintained that in making his second distinction he is taking *both* essence and existence in act. Conscious of a furtive difficulty, he admits that if "existence" is taken in its strict sense of exercised act, the only distinction between essence and existence is that of a potential being from an actual being. Yet he insists again that, according to the true notion of existence which extends from exercised to signified existence, his present distinction is not between actual existence and merely potential essence nor between terms which abstract from actuality and potentiality but between actual existence and actual essence.<sup>89</sup> Expressly, then, Suarez continues to assert that the essence which is now conceptually distinct from

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actual existence is neither that of potential essence nor that of essence in abstraction from both actuality and potentiality but definitely that of essence as actual.

How can this stand be reconciled with his doctrine as just sketched, which maintained that the essence which is here conceptually distinct from actual existence abstracts and prescinds from all actual essential entity? Suarez endeavors to explain it by examining more closely the two concepts of essence and existence. They denote the same reality (*res*). That reality is conceived as essence when it is described by its quidditative predicates. The same reality, on the other hand, is conceived under the aspect of existence when it is expressed as being in reality and outside its causes. Since actual entity does not follow from the essence itself, the *reception* of such entity means that something is now being conceived in it which is for it the formal aspect of being outside its causes and so is a different conception and description of the one identical reality and therefore suffices for a conceptual distinction.<sup>90</sup>

True, one has here two different descriptions and concepts of the same thing. This is amply sufficient for a conceptual distinction. But what notion of essence forms the first term of this conceptual distinction? The aspect of actual entity outside causes is precisely what distinguishes the second concept, that of existence, from the first, that of essence. The aspect of actual essential entity expressly does not belong to the first concept but only to the second. The difference in the concepts lies in the lack of actual entity in the content of the first and the inclusion of actual entity in the content of the second.

<sup>90</sup>"Dicendum ergo est, eamdem rem esse essentiam et existentiam, concipi autem sub ratione essentiae, quatenus ratione ejus constituitur res sub tali genere et specie. . . . At vero haec eadem res concipitur sub ratione existentiae, quatenus est ratio essendi in rerum natura et extra causas. Nam quia essentia creaturae non hoc necessario habet ex vi sua ut sit actualis entitas, ideo quando recipit entitatem suam, concipimus aliquid esse in ipsa, quod sit illi formalis ratio essendi extra causas; et illud sub tali ratione appellamus existentiam, quod licet in re non sit aliud ab ipsamet entitate essentiae, sub diversa tamen ratione et descriptione a nobis concipitur, quod ad distinctionem rationis

sufficit" (*ibid.*, 23; 250a).

<sup>91</sup>Cf.: ". . . est enim actualitas illa transcendens, et participatur non solum ab actu formali, sed etiam a potentia receptiva, cujus entitativa actualitas . . ." (*ibid.*, 5, 15; 241b). Cf. also texts *supra*, nn. 56-59.

<sup>92</sup>"Hujus autem distinctionis fundamentum est, quod res creatae de se non habent esse, et possunt interdum non esse. Ex hoc enim fit ut essentiam creaturae nos concipiamus, ut indifferentem ad esse vel non esse actu, quae indifferentia non est per modum abstractionis negativae, sed praecisivae; et ideo quamvis ratio essentiae absolute concipiatur a nobis etiam in ente in potentia, tamen multa magis intel-

Once more, the essence which is the first term of the Suarezian conceptual distinction is not conceived as actual essence. It is a term different from what was previously found to be really identical with existence. The concept of the actual essential entity considered as received by it is precisely the concept of actual existence.

The first term of this conceptual distinction, accordingly, is still not actual essence. What is it, then? Is it potential essence, or is it the common notion of essence which abstracts from both potentiality and actuality? Both these latter acceptations have been explicitly set aside by Suarez. He does not wish either. He insists that the first term of his own distinction is here *actual* essence. Yet everything noted so far in his description of this first term characterizes it as nonactual. So it should be either potential essence or else essence in abstraction from both actuality and potentiality. The only hint that Suarez is in fact somehow conceiving it as actual essence is his remark that it *receives* its entity. Potential essence, in the Suarezian doctrine, cannot receive actual existence; it is not a subjective or receptive potency. An essence represented as a receptive potency could, for Suarez, be conceived only as an actual essence.<sup>91</sup>

Can Suarez, then, make good a case for describing the first term of his conceptual distinction in ways that definitely exclude all notion of actuality from its intrinsic content and on the other hand maintain that it is conceived as a receptive potency for existence and so as something actual? He attempts to do this by examining the real basis for the distinction and the genesis of the two concepts as they emerge from that real foundation.

The real basis for distinguishing the two different concepts of essence and existence, he finds, is that created things do not have their being from themselves and are able not to be. On this foundation the essence of a creature is conceived as *indifferent* to actual being and nonbeing. This indifference to actual being and nonbeing is not merely a negative but rather a *precisive* abstraction. Essence so conceived is found both in potential essence and in actual essence, though of course in the latter case it *prescinds* from the actuality of being. Taken as found in an actual being, though prescinding from that actuality, Suarez claims, essence is conceived as potency, existence as its act.<sup>92</sup>

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The concept which forms the first term of the Suarezian distinction, therefore, is now described as the concept of something indifferent in itself to actual and potential being. It is a concept whose content may be found in a potential being and also may be found in an actual being. It is conceived in precise abstraction from both actual and potential being. Intrinsically, therefore, it does not contain the notion of actual essential being. Yet it is explicitly understood now by Suarez as potency to the act of existence, as the potency which has existence as its act. It is conceived as a subjective potency and so as something actual. The concept of essence as subjective potency is in Suarez's thought the concept of an actuality. In spite of what he has just said about the indifference of essence, as here considered, to actual being and nonbeing, the first term of the Suarezian distinction cannot be left as a sort of quasi-generic notion of essence which would have as its inferiors actual essence and potential essence nor as merely potential essence.<sup>93</sup>

But how can such a concept, whose intrinsic content prescind from all actuality, be in any way considered a concept of actual essence? According to the Suarezian description of its genesis, it represents the indifferent quidditative content as abstracted not from a potential being but from an actual being. The intrinsic content of the concept prescind from all actual essential being but is conceived nevertheless as retaining a reference to the actual being from which it was abstracted. From that actuality, now wholly external to its intrinsic content, it is denominated actual. By a sort of extrinsic denomination Suarez is able to call this concept the concept of actual essence for

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ligimus reperiri in ente in actu, licet in eo praescindamus totum id, quod necessario et essentialiter ei convenit, ab ipsa actualitate essendi; et hoc modo concipimus essentiam sub ratione essentiae, ut potentiam; existentiam vero ut actum ejus" (*Dis. Metaphys.*, xxxi, 6, 23; Vives, xxvi, 250a).

<sup>93</sup>Cf. *supra*, nn. 82 and 89.

<sup>94</sup>Cf. text *supra*, n. 92.

<sup>95</sup>Cf. *supra*, n. 25. The arbitrary construction of this new concept is apparent likewise from its casual connection with its basis in reality. The imperfection of a creature and the observation that a crea-

ture can receive something from another furnish the *occasion* for forming such a concept. "Hac ergo ratione dicimus hanc distinctionem rationis habere in re aliquod fundamentum, quod non est aliqua actualis distinctio quae in re intercedat, sed imperfectio creaturae, quae, alio ipso quod ex se non habet esse, et aliud potest ab alio recipere, occasionem praebet huic nostrae conceptioni" (*Dis. Metaphys.*, xxxi, 6, 23; Vives, xxvi, 250a). That is, not its receiving existence, which for Suarez it cannot properly receive, but its receiving something else, provides the occasion for the new concept.



the purpose of conceiving it as receptive potency, while at the same time maintaining that it prescind from all actual essential entity.

As far as its intrinsic content is concerned, therefore, the concept of essence which is here differentiated from the concept of actual existence is not at all the concept of actual essence as actual essence was understood in the question of real identity with existence. Rather, it is the concept of essence as indifferent to both potentiality and actuality. If it had been found in a potential being instead of in an actual being, it would have exactly the same intrinsic content.<sup>94</sup> Just as Suarez earlier in the *Discussion* had arbitrarily restricted the concept of essence in itself to that of potential essence, so now just as arbitrarily<sup>95</sup> he is distinguishing it from the concept of potential essence by the quite artificial addition of the factual reference to an actual being.

Similarly the notion of *receptive* potency seems added at least just as arbitrarily to the content of this concept of essence. There is nothing in the notion of the Suarezian essence as such to require the notion of receptive potency. Rather, the essence as such can be found in potential essence, which excludes the notion of receptive potency. Nor can the notion of receptive potency be drawn from the concept of actual essence, since actual essence is identical with the act which is being contradistinguished from that receptive potency. For Suarez the notion of actual existence needs no corresponding notion of a subjective potency into which it is received. Only some extrinsic motive to bring the concepts of existence and essence into the analogy of the Aristotelian form as act and matter as receptive potency could prompt such an arbitrary addition of the notion of receptive potency in the content of this further Suarezian concept of actual essence.

Suarez himself, however, gives no more detailed explanation of the nature of so amazing a concept. Instead, he centers his interest on showing that the doctrine which he defends is sufficient to state absolutely that actual existence is not of the essence of a creature. In this assertion the notion of a creature is not understood as that of real actual entity, for actual entity necessarily implies actual existence, and so actually to exist is included in the actual essence of a creature. When essence is taken in the sense of actual essence, therefore, it is of

the essence of a creature to exist.<sup>96</sup> However, in saying that actually to exist is not of a creature's essence, one is taking the creature as it abstracts or prescinds from both actual and possible creation. One has an objective concept of essence which abstracts from actual being or entity. In the concept of essence taken in this precision, no actual existence is contained. In this sense, accordingly, one says that actually to exist is not of the essence of a creature. But for this, the conceptual or negative real distinction between potential essence and actual essence suffices.<sup>97</sup>

This is Suarez's final word. It is not, then, a concept of actual essence which safeguards the notion of a creature. The concept of actual essence cannot help here, for it essentially involves actual existence. Rather, the concept has to be a concept of essence which prescinds from all essential actuality, in the sense that it includes no notion of actual entity or actual being in its content. Objectively conceived, such essence abstracts from potential as well as actual creation. As used here by Suarez, however, this indifferent essence now ultimaely appears, just as so often before, as potential essence. The distinction which Suarez uses to justify the notion of a creature is therefore finally located in only the first of the two distinctions which he defends between essence and existence in creatures—namely, the real negative or conceptual distinction between a potential being and an actual being. In this case the real (negative) distinction and the conceptual distinction fall between the same two terms. Even here there is no question of a conceptual distinction between terms that are not, in their own negative way, really distinct.

In *both* the Suarezian conceptual distinctions between essence and existence, accordingly, the distinction falls between the concept of actual existence and a concept of nonactual essence. In the first

<sup>96</sup>"... in hac locutione nomine creaturae non est intelligenda realis entitas actualis seu acta creata; nam, si cum hac reduplicatione vel compositione fiat sermo, revera creatura essentialiter petit, actu existere, ut sit creatura. Atque in hoc sensu, sicut albedo est de essentia albi, ut album est, ita existentia est de essentia creaturae. . . ." (*ibid.*, 6, 24; 250ab).

<sup>97</sup>"Cum autem negatur esse de essentia creaturae actu existere, sumenda est

creatura ut abstrahit seu praescindit a creatura creata et creabili, cujus essentia objective concepta abstrahit ab actuali esse aut entitate, et hoc modo negatur esse de essentia ejus actu existere, quia non clauditur in conceptu ejus essentiali sic praeciso. Ad quae omnia sufficit distinctio rationis, vel realis negativa, quae est inter essentiam potentialem et actuaalem" (*ibid.*; 250b).

conceptual distinction it is explicitly between the concept of potential essence and the concept of actual existence. In the second conceptual distinction, it lies in fact between the concept of actual existence and a concept of essence which is indifferent to actuality and potentiality in its intrinsic content but which is arbitrarily considered in extrinsic relation to an actual being though excluding all essential actuality in itself. In neither conceptual distinction are the terms which had been really identified the same terms which are now conceptually distinguished. Actual essence and actual existence were the terms which were found to be really identical, while *nonactual* essence—in the one case as potential, in the other case as indifferent—is the term which is conceptually distinguished from *actual* existence.

## VII. Conclusions

Suarez, therefore, has not succeeded in finding a conceptual distinction between the same two terms whose identity he had satisfactorily established. Moreover, he does not even seem to have any interest at stake in the failure of his attempt to do so. He was keenly set on proving, according to the exigencies of his metaphysics, the real identity of essence and being. He was at least equally intent, in his Christian background, on maintaining that actually to exist is not of the essence of a creature. But for the latter tenet a conceptual distinction between *potential* essence and *actual* existence sufficed. That distinction was the only one *used* by Suarez for the purpose and so is the only distinction between essence and being which exercises any operational function in his metaphysical procedure.

Why, then, did Suarez bother to advance a second conceptual distinction, one meant to fall between actual essence and actual existence? It is a distinction which serves no purpose in the movement of his metaphysical reasoning. It is a distinction which gives no further insights into his doctrine of being. It is a distinction which has for its first term an artificially constructed concept consisting of the content of nonactual essence plus an arbitrary extrinsic and factual reference to an actual being and a still more arbitrary connotation of the actual entity that constitutes a receptive potency as Suarez inter-

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prets the Aristotelian doctrine of matter and form. Certainly he gains no metaphysical advantage from this tactic. Can he at all be following a genuine metaphysical inspiration in proposing such a distinction? Is he in any way led to it through an original and personal contemplation of being?

The distinction hardly follows from a disinterested metaphysical scrutiny of the terms (*extrema*) involved. As its first term it uses a concept of actual essence which could scarcely arise from the mere consideration of essence and being in creatures. On the contrary, it has to make an artificially and arbitrarily constructed concept. Suarez must have some extrinsic motive for attempting such a construction. What motive can he have? The only indication in the structure of the thirty-first *Metaphysical Discussion* is that he was undertaking the defense of a position already drawn up in definitely articulated form through centuries of controversial litigation. The case was already constructed; the lawyer undertook to defend it as received. It called for the rejection of a real distinction and the defense of a conceptual distinction which would safeguard the doctrine of creation. It had traditionally taken for granted, without ever subjecting the point to judicial examination, that the conceptual distinction should fall between the same terms which were shown to be really identical.

Such is the case which Suarez undertook to defend. He made good his first point, showing incontestably that actual essential being and actual existential being are identical in reality. He likewise proved satisfactorily that a conceptual distinction between potential essence and actual existence safeguards the notion of a creature. Those were the two points at issue before the court. The further conceptual distinction between actual essence and actual existence served only to round out the symmetry of Suarez's presentation of the case and bring it into conformity with the traditional jurisprudence that had emerged from the long historic controversy and that formed the background in which the judges would give their decision. That second conceptual

<sup>98</sup>"Et imprimis nullus est Theologorum, qui distinctionem rationis inter essentiam et existentiam non admittat, quamvis non omnes eodem modo illam explicant" (*ibid.*, 6, 16; 247a). The nominalistic influence on Suarezian distinctions has been noted by critics; cf. C. Vollert's introduction to

*On the Various Kinds of Distinctions* (Milwaukee: Marquette Univ. Press, 1947), p. 12. However, for the case against any basic nominalism in Suarez, cf. P. Descoqs, "Thomisme et suarézisme," *Archives de Philosophie*, iv (1926), 90-101.



distinction had no legal bearing on the two points at issue. That it introduced a concept of essence, which from a metaphysical viewpoint was a bizarre combination of the notion of essence in itself with the arbitrary external references to an actual being and to an analogy with the doctrine of matter as subjective potency, need hardly have been expected to enter into the consideration of the bench. That an essence so understood could be called "actual" only by an extrinsic denomination was of no special concern to the advocate. His client had been arraigned on a charge of excessive realism, not of nominalism. After a successful defense on that main issue, the only other interest was to forestall a possible charge of heresy which on the basis of past juridical practice might be expected as a countercharge against the rejection of a real distinction.

Both the legal points at issue before the court, then, were ably defended by Suarez. The attention of the judges was concentrated on those points only. Conceptual distinction was cited as something admitted by all theologians, though explained by them in various ways,<sup>98</sup> so that the particular way of explaining it could not have decisive importance for the issues legally involved. The introduction of the second Suarezian conceptual distinction made the case fit into the whole juridical pattern with which the judges were familiar. That it did so by extrinsically denominating "actual" a notion of nonactual essence was sufficient to satisfy the legal technicalities and could occasion no judicial scrutiny where a charge of nominalism had not been laid. Viewed after the manner of a legal process, the Suarezian procedure in the thirty-first *Discussion* makes excellent sense. Only from the standpoint of metaphysical penetration does it become confusing and pointless when it treats the conceptual distinction between actual essence and actual existence.

What the Suarezian *Discussion* accomplishes in an entirely convincing manner, however, is to show definitively that essential being and existential being cannot be distinguished in reality outside the mind. Earlier in the present century the Dominican Norbert del Prado, one of the most intransigent opponents of the Suarezian position in modern times, wrote that the arguments of Suarez include all that had been previously said and all that his successors have been able to

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say on the subject.<sup>99</sup> At the time this tribute may have seemed a highly chivalrous gesture across the havoc of controversy. Today it rather damns with faint praise. Suarez has presented his arguments with such pitiless cogency that the case of the real identity of essential being and existential being should have been closed forever.<sup>100</sup> The Suarezian *Discussion* shows with incontestable rigor that when the terms of the problem are posed as essential being and existential being, both types of being really coincide.

By the same token, the Suarezian *Discussion* leaves entirely untouched the profound metaphysical doctrine contained in the Thomistic texts; namely, that the essence of a creature is other than either its real or its cognitional being.<sup>101</sup> This Thomistic distinction falls between the essence itself and the being which gives the essence its first and most basic and most intimate actuality. In the terms used by Suarez, it would lie not between essential being and existential being but between essential being and essence, leaving any further existential being just as superfluous and just as impossible as Suarez had shown it to be. But Suarez exhibits no knowledge that such a doctrine ever existed and no notion that it could even be possible. He shows no inclination whatsoever to get outside the narrow juridical limits in

<sup>99</sup>*De Veritate Fundamentali Philosophiae Christianae* (Fribourg, 1911), p. 152.

<sup>100</sup>Del Prado's (*De Veritate*, pp. 154-64) answers to the Suarezian arguments, for instance, carefully change the problem from that of the distinction between essential *being* and existence to that of the distinction between essence and *being*, as described in the texts of St. Thomas.

<sup>101</sup>Cf.: "Infatti che significato può avere la distinzione reale, se l'ente creato è costituito intrinsecamente dalla sola essenza, e l'esistenza vi ha semplicemente la parte di principio accidentale? Tale distinzione non tocca l'ente nella sua intima costituzione . . ." (I. Bonetti, *Divus Thomas* [Piacenza], LIV [1951], 367). There is of course nothing to prevent the word "Thomist" from being used in a number of different senses as far as doctrine is concerned. For Suarez, according to the usage of his times, it meant the school of thought represented by Capreolus, Cajetan, and so on. "Thomistic" is

still used today in that sense; for example, in regard to a problem related to the present one: ". . . the Thomistic theory of personality . . . is completely in accord with St. Thomas' dicta," (T. U. Mullaney, "Created Personality: The Unity of Thomistic Tradition," *New Scholasticism*, XXIX [1955], 399). Concerning the question of existence, however, studies like those of E. Gilson, "Cajétan et l'existence," *Tijdschrift voor Philosophie*, xv (1953), 267-286, and N. Wells (cf. *supra*, nn. 31 and 39) indicate that the doctrine of being found in these commentators is, from a purely metaphysical standpoint, radically different from that of St. Thomas.

<sup>102</sup>Cf.: "Non trascurò certamente le questioni metafisiche, tutt'altro; le studiò e le discusse con grande erudizione e passione; ma le vide attraverso la preoccupazione del concreto" (C. Giacon, *Suarez* [Brescia: Soc. ed. 'La Scuola', 1945], p. 111).

which his case had been cited<sup>102</sup> and no cognizance of any deeper metaphysical stratum on which the problem of essence and being could be investigated. In the present revival of interest in the metaphysical doctrine of St. Thomas, the case of Suarez is perhaps the best object lesson in what happens when the Thomistic essence is represented as any kind of essential *being* or even conceived as having some kind of proper being in its own right, whether such being is looked upon as real or as only intentional.

On the broader metaphysical panorama, however, the Suarezian *Discussion* provides an extremely interesting and profitable illustration of the difficulty, and finally the impossibility, of finding any content over and above essence in the notion of being, once a thing and its being have been considered identical in reality. Successful though Suarez has been in making his case against a real distinction between essential being and existential being, which was the comparatively superficial problem of his own day, he can hardly be said to have had corresponding success in regard to the more comprehensive question which interests present-day metaphysics. Suarez has not provided an instance of showing that one may deny a real distinction between a thing and its being and then establish a conceptual distinction between the same two terms. From this viewpoint the Suarezian experiment can only be catalogued as another outright failure in the long history of this tempting but hopeless project.

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## Chronicle

THE MOUNTAIN-PLAINS PHILOSOPHICAL CONFERENCE held its eleventh annual meeting at the University of Colorado, October 11-13, 1956. The general theme was "Philosophy and Politics." The papers were: "Politics and Nature," by Glenn Gray (Colorado College), discussed by Robert W. Craig (Aspen Institute for Humanistic Studies); "Social Contract—Myth or Reality?" by Cornelius Sullivan (U. S. Air Force Academy), discussed by Henry W. Ehrmann (University of Colorado); and "Politics and Culture," by William Kent (University of Utah), discussed by Rollo Handy (University of South Dakota).

THE ASSOCIATION FOR REALISTIC PHILOSOPHY held its fall meeting at Cambridge, Mass., on October 26 and 27, 1956. The papers were: "On the Being of Non-existents," by Rudolf Allers (Georgetown University), and "Comments on Psychology and the Concept of Human Nature," by Abraham Maslow (Brandeis University). There was also a discussion on "Some Problems for Realistic Philosophy—Concrete Commitment—Art, Politics, Religion." The panel was composed of Robert C. Baldwin (University of Connecticut), William A. Gerhard (Brooklyn College), Ellen Haring (Wellesley College), and J. Arthur Martin (Wheaton College).

THE GUILD OF CATHOLIC LAWYERS of New York conducted its fourth annual Conference on the Natural Law on December 15, 1956. Professor Edwin P. McManus (Georgetown University Law School) led a discussion on "The Application of the Natural Law to the Fifth Amendment"; and Professor John C. Hayes (Loyola University Law School) led another on "The Application of the Natural Law to Private and Religious Schools under the United States Constitution."

THE SAINT LOUIS UNIVERSITY LIBRARY announces a new journal, *Manuscripta*. To appear three times a year, the journal will usually contain material useful for research in the Knights of Columbus Vatican Film Library at Saint Louis University, scholarly articles of a more general nature (including articles based on research at the Library), and, in the early issues, the complete listing of all the codices filmed. Subscription price will be \$4.00 per year; the journal will be published at Saint Louis University (Saint Louis 3, Missouri).

At the same time, the University Library announces a new project, the filming of rare printed books in the Vatican library. Copies of these films are to be made available at as low a price as possible.

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## NOTES AND DISCUSSION

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### Two Notes on Fonseca

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#### I

#### Fonseca on Metaphor

Pedro da Fonseca (1528-1599), the Portuguese Aristotle,<sup>1</sup> chief of the *Conimbricenses* (the group of Jesuit commentators on Aristotle from the University of Coimbra<sup>2</sup>), was one of the great figures of the Scholasticism of the Renaissance but is practically unknown today. *The Catholic Encyclopedia* says of him that "his greatest claim to lasting reputation lies in the fact that he first devised the solution, by his *scientia media* in God, of the perplexing problem of the reconciliation of grace and free will."<sup>3</sup> His fame as a theologian no doubt rests secure; but the title of "the Portuguese Aristotle" that he was given is an indication that he may have other claims to a lasting reputation. One of these claims is found in the fact that he was the proponent of a view of metaphor that deserves more than passing attention.

In his *Rhetoric*, Aristotle tells us that "metaphor must be drawn . . . from things that are related to the original thing, and yet not obviously so related—just as in philosophy also an acute mind will perceive resemblances even in things far apart."<sup>4</sup> He sees, then, a parallel between philosophical insight and that insight which results in metaphor. They both consist in perceiving resemblances even between things far apart. We wish here to turn attention towards the rather evident yet important point that the resemblances are between the things themselves, and not between aspects which are external to those things. Aristotle also tells us in his *Poetics* that "the greatest thing by far is to be a master of metaphor. It is the one thing that cannot be learnt from others; and it is also a sign of genius, since a good metaphor implies an intuitive perception of the similarity in dissimilars."<sup>5</sup> We have, in this passage, a repetition of the same doctrine that we saw in the *Rhetoric*; namely, that a good metaphor (and we are not concerned with bad ones) implies an intuitive perception of the similarity in dissimilars. There are two factors that we can see involved in all

metaphor; namely, the dissimilarity between two sets of things and, simultaneously, their similarity. They differ in their modes of being; and yet these diverse modes have a certain resemblance to one another. It is significant to notice Aristotle's comparison between the capacity to produce a good metaphor and the capacity for philosophical intuition. They both consist in the ability to discover resemblances between things which are dissimilar. The philosopher discovers the similarity in being between the diverse forms of being; the poet discovers similarities in nature, as when Keats calls the Grecian urn the "still unravished bride of quietness and slow time."

At the time of the Renaissance a question arose among the Scholastic philosophers as to whether metaphors were predicated intrinsically of their subjects; in other words, they asked whether a metaphor describes anything really present in a subject. The common example taken for illustrating the problem was that of a smiling field. *Smiling* is predicated metaphorically of a field, and the question is whether the field is really smiling or not. Some said no; others avoided a direct answer to the question;<sup>6</sup> and only one thinker, to our knowledge, replied clearly in the affirmative—namely, Fonseca. Among those who answered no, John of St. Thomas likens metaphor to the analogy of attribution insofar as both of them are extrinsic for one of their subjects.<sup>7</sup> Pedro Descoqs, s.j., divides proportionality into the

<sup>1</sup>See the *Enciclopedia Cattolica* (1950), v, 1488.

<sup>2</sup>See F. Copleston, s.j., *History of Philosophy* (3 vols., Newman Press), III, 341.

<sup>3</sup>See vi, 126, col. 1.

<sup>4</sup>iii. 2.

<sup>5</sup>22. 1459a3-7.

<sup>6</sup>See Cajetan, *De Nominum Analogia*, ed. Zammit (Rome, 1952), cap. III, s. 25.

<sup>7</sup>"Dicimus analogiam attributionis et similiter metaphoricam, quae illi valde affinis est quantum ad formam analogice dominantem, necessario debere esse in uno intrinsece, in aliis extrinsece et denominative" (*Cursus Phil. Thom.*, log. II, q.13, a.4, ed. Reiser [Turin: Marietti, 1930], I, 847, col. 2, ll. 19-32).

<sup>8</sup>"[analogia] proportionalitatis . . . dividitur in *intrinsecam*: ita substantia et accidens relata ad esse, et *extrinsecam*, quae est metaphora: ita risus prati"

(*Praelectiones Theologiae Naturalis* [Paris: Beauchesne, 1935], II, 574).

<sup>9</sup>Page 255.

<sup>10</sup>"... la métaphore . . . comporte une certaine réalisation intrinsèque qui entraîne quelque objectivité dans la comparaison" (*Le Rôle de l'analogie en théologie dogmatique* [Bib. Thomiste xv, Sect. Theol., 2; Paris: Vrin, 1931] p. 101).

<sup>11</sup>"Nam principium significat naturam principii existentem in omnibus, quae dicuntur principia, eodemque modo se res habent in caeteris non modo proprie dictis, sed etiam improprie, et per tropum. Ridere enim, exempli causa, significat risum non modo inhaerentem homini, sed etiam suo modo florenti prato. Namque ipsa florum productio est quaedam quasi hilaritatis significatio per vultum" (*In IV Metaphys. Arist.*, cap. 2, q.1, s. 6 [Rome, 1577], I, 545. The italics are mine.).

intrinsic and the extrinsic varieties, the latter being the proportionality of metaphor; "for example, the smile of a field."<sup>8</sup> Professor Anderson, in his *Bond of Being*, also denies that metaphor is intrinsic.<sup>9</sup>

The Abbé Pénido gives a tentative assent to the proposition that metaphor is intrinsic. He tells us that it "involves a certain intrinsic realisation, which entails some objectivity in the comparison."<sup>10</sup> But, seemingly, only Fonseca has stated without qualification that metaphors refer to something really present in the subject. In his *Commentary on the Metaphysics of Aristotle*, he tells us that

the word "principle" signifies the nature of a principle existing in *all* those things which are called principles; and the same thing happens in the other cases not only of words used properly but also of those used *improperly and by extension of meaning*. For example, "to smile" means a smile not only inhering in a man but also *after its own manner* in a flowering meadow. For that production of flowers is, as it were, a certain signifying of laughter on the face.<sup>11</sup>

We might notice here that the definition of a metaphorical term is of a term used improperly and by extension of meaning. We have, then, in the above passage, a clear assertion that metaphorical terms are predicated intrinsically. Fonseca denies in this passage that the attribute designated by the metaphor is univocally present in each subject. He says rather that the smile is present in the field *after its own manner*. So the metaphorical use of a term implies a difference between the two subjects of its predication. Men's faces are dissimilar to fields. Yet on the other hand there is a similarity between these two subjects, since they both have smiles. Fonseca seems to be elucidating here Aristotle's remark about the "intuitive perception of similarity in dissimilars." We believe Fonseca's views to be a faithful elucidation of Aristotle's theory of metaphor. Aristotle was the philosopher *par excellence* of analogy; and when he likened the insight implied by a good metaphor to philosophical insight, we can only conclude that he saw metaphor as a form of intrinsic analogy. In confirmation of the above position let us note the following passage from Fonseca.

It must be said that those things in which the analogy of proportionality is found simultaneously with the analogy of one to another, the form signified can be in all the members [that is, of the analogy], as is evident in *foot* insofar as it is predicated of the foot of an animal and of a bench. In the foot of a bench there can be seen, at the same time, both the imitation of an animal's foot (which is a certain attribution) and a certain proportion to it. So it is that "footness," which

is the form signified by the name "foot," is present after its own manner in the foot of a bench, just as it is in an animal's foot.<sup>12</sup>

Once more, then, metaphorical predication is asserted to be intrinsic; once more we are referred to the similarity in difference between two things, each possessing, after its own manner, something which is similar to something possessed by the other. Fonseca's next sentence after this passage is very significant: "In the same way, therefore, does a thing have being with respect to God, and to the creature, on account of each analogy, proportional as well as attributive."<sup>13</sup> From this statement, we can conclude that Fonseca saw no difference between the way in which *being* is predicated of a creature and the way in which *foot* is predicated of the foot of a bench, or *smiling* of a smiling field.

Before concluding we will notice one objection to the intrinsic predication of metaphors. Professor Anderson says that "things can receive a metaphorical predication not because they share integrally and properly a perfection or form which is common to them proportionately, but only because there is some dynamic likeness between them—a likeness consisting in the production of similar effects."<sup>14</sup> It is difficult to understand how things can produce similar effects without being similar to one another in some thing which is intrinsic to each one. St. Thomas says that "every agent

<sup>12</sup>"Dicendum est, in quibus analogiam proportionis simul reperitur cum analogia unius ad alterum, in iis posse formam significatam inesse in omnibus membris, ut patet in pede, quatenus dicitur de pede animalis et lecti, in pede enim lecti simul cernitur, et imitatio pedis animalis, (quae est quaedam attributio), et proportio quaedam ad illum. Ita sit ut pedalitas, quae est forma significata nomine pedis, insit suo modo in pede lecti, quemadmodum in pede animalis" (*ibid.*, s.7, p. 548).

<sup>13</sup>"Eodem igitur modo res habet in ente repectu Dei, et creaturae propter utramque analogiam, et proportionis et attributionis" (*ibid.*).

<sup>14</sup>*Bond of Being*, p. 172. See also E. L. Mascall, *Existence and Analogy*, p. 103, for a similar argument.

<sup>15</sup>"Cum enim omne agens agat sibi simile" (*Summa Theol.*, I, q.4, a.3. See *ibid.*, q.6, a.1; q.110, a.2).

<sup>16</sup>"... quidquid est imago alicuius simili alteri, est etiam imago illius alterius

quatenus primo assimilatur" (Cajetan, *De Conceptu Entis*, n. 3).

<sup>17</sup>Cf. the following passage from Fonseca's *In IV Metaphys. Arist.*, cap. 2, q.1, s.6 (I, 543): "Excludenda est in primis ab hac disputatione analogia quaedam, quam Arist. 7 Phys. cap. 4 et lib. 10 huius operis cap. 13 in natura generum subesse docet: quam D. Thom. I Sent. d.19 vocat analogiam secundum esse tantum, Caietanus autem in libello de analogia nominum analogia inaequalitatis . . . hoc genus analogiae . . . non impedit veram unionem . . ."

<sup>18</sup>*Bond of Being*, p. 32.

<sup>19</sup>*Ibid.*, n. 1.

<sup>20</sup>Cf. Duns Scotus: "Omnis inquisitio de Deo supponit intellectum habere conceptum eundem univocum quem accipit ex creaturis" (*Opus Oxon.*, d.1 q.3 a.2 n.10) and "Deus et creatura non sunt primo diversa in conceptibus tamen sunt primo diversa in realitate: quia in nulla realitate conveniunt" (*ibid.*, d.8 q.3 n.11).



produces its own likeness.”<sup>15</sup> An agent can only produce its own likeness insofar as it produces something similar to itself. Now, a thing cannot be extrinsic to itself; and therefore likeness between things is due to something intrinsic to each thing. If the effects of two agents are similar, then the agents themselves must be similar to one another. Similarity, after all, is a symmetrical and transitive relationship.<sup>16</sup> In respect of any quality *Q*, if *A* is similar to *B*, then *B* is similar to *A*. If *A* is similar to *B* and *C* is similar to *D*, and if *A* is also similar to *C*, then *B* must be similar to *D*.

## II

### Fonseca on Logical Univocity

Fonseca’s views on the subject of logical univocity are not without permanent value, and they show a fidelity to the thought of Aristotle which, in this field, is not easily to be found in the writings of his better-known commentators. Though their views coincide, Fonseca, to all evidence, arrived at his position independently of Aristotle. In fact, at one stage in his thought he adhered to the traditional view,<sup>17</sup> but he later made a radical change in his opinions and engaged in a vigorous criticism of the whole subject of logical univocity.

Professor Anderson, when discussing this subject (he calls it “analogy of inequality,” following Cajetan’s terminology), says that “the philosophic significance of analogy of inequality has been generally ignored, even by scholastic authors”;<sup>18</sup> and in a footnote to this statement, he says that this “analogy” is usually disposed of in a few short paragraphs and very often not mentioned at all. “As far as I know, Cajetan wrote more on it than anyone up to his time (d.1534), namely five paragraphs, about three small pages (in his *De Nom. Anal.* I, 6-9).”<sup>19</sup> Some fifty years after Cajetan’s death, Fonseca was to submit the underlying assumptions of the analogy of inequality to a fundamental criticism. This, so far as we know, is the only criticism ever made of this form of analogy, leaving aside unpublished material.

The historical origins of the analogy of inequality—or, as we intend to call it, the theory of logical univocity—are difficult to discover. There are two fields in which the theory has application. One of them is that of Scotistic metaphysics; the other is that of generic predication. The Scotists maintain that terms common to God and creatures are univocally common, whereas, in reality, God and creatures have nothing univocally in common.<sup>20</sup>

As regards generic predication, it was a more or less unanimous opinion among Scholastic thinkers that while generic terms were predicated analogically of things in the physical world, they could nevertheless be predicated univocally of them provided you considered the generic idea in itself and apart from the things themselves. So, for example, the term "animal" is predicated analogically of real animals but univocally of the generic idea of an animal considered apart from all real animals.

Gilson traces the origins of Scotus's theory of being to Avicenna;<sup>21</sup> yet the explicit distinction between logical univocity and real analogy is not mentioned by Gilson as having been made by Avicenna himself. It may perhaps be reasonable to suppose that the explicit distinction was first made in the field of generic predication. Yet when we come to seek it there, we are unsuccessful. The historians have not yet investigated this field. When we have in fact come across it, the distinction is already treated as if it were common knowledge and as if everyone knew its sources. Most often it is ascribed, consciously or unconsciously, to Aristotle. There are two passages in his works which are, as it were, the *loci communes* for making the distinction. What is strange is that Aristotle does not himself make it, and in one passage he even rejects it. The relevant passages are the first part of Chapter 4, Book vii of the *Physics* and Chapter 10 of Book x of the

<sup>21</sup>See Gilson, *Duns Scot*, pp. 84-115.

<sup>22</sup>*Physics* vii. 4. 248b25-27.

<sup>23</sup>*Ibid.* 249a1-3.

<sup>24</sup>*Ibid.* 248b15.

<sup>25</sup>*Ibid.*, especially 249a21-25.

<sup>26</sup>See n. 17.

<sup>27</sup>See Averroes, *In vii Physic. Aristot. Comm.*, text. et comm., 25-26 and *In x Metaphys. Aristot. Comm.*, text. et comm., 26 (Venice, 1489).

<sup>28</sup>"Corruptibile et incorruptibile univocantur in genere logico, et tamen aequivocantur in genere naturae" (*In x Metaphys. Aristot. Comm.*, text. 26 [Venice, 1572], p. 303, verso col. 1 F).

<sup>29</sup>"Illa sunt infra unum genus logicum quae sunt infra unum conceptum potentialem, qui potest trahi ad diversas species" (*ibid.*).

<sup>30</sup>"Si enim diffiniuntur in communibus suis intentionibus secundum quod abstractum ab hoc et ab illo, et a quolibet alio multo vel duplo in universaliori: erit logica diffinitio istorum, et secundum rationem

logicam erit in omnibus ejusdem rationis" (*In vii Phys. Arist.*, tract. ii, text. et comm. 26, ed. Vives, III, 508). Cf. also "Animalis est una ratio ut generis. Si autem animal secundum esse sumitur in unoquoque, tunc variatur esse ejus differentiis specierum sibi adjunctis: et tunc sic variatum habet alteram et alteram secundum esse definitionem" (*In i De Anima Comm.*, tract. 1, cap. 4, text. et comm. 8, ed. Vives, v, 124, col. 1, in fine).

<sup>31</sup>Cf. the *De Anima* listed among the *dubia* of Duns Scotus where the author says that "ens autem prout praedicatur de decem praedicamentis metaphysice vel naturaliter, non dicit unum conceptum, nec est genus naturale eorum metaphysicum, tamen est genus univocum loquendo logice" (q.21, n.12).

<sup>32</sup>"Fieri ne possit, ut aliquid sit genus logice, quod non sit etiam physice?" (*In v Metaphys. Arist. Comm.*, cap. 8, q.4, s.4 [Rome 1589], ii, 444).

*Metaphysics*. Aristotle denies logical univocity in the following words: "It would seem, however, that we must reject this solution, since clearly we could thus make all equivocal attributes univocal and say merely that that which contains each of them is different in different cases."<sup>22</sup> And he goes on to say that "it is not any casual thing that is capable of carrying any attribute; each single attribute can be carried only by one single thing."<sup>23</sup> He had previously said that "there are terms of which even the definitions are equivocal,"<sup>24</sup> and the text following upon this assertion goes to show that generic terms come under this heading.<sup>25</sup> Among Aristotle's Scholastic commentators, it seems that only Fonseca upheld this view, and even he at one point admitted its contrary.<sup>26</sup>

Averroes, in his commentaries upon the above passages, does not put forward the theory of logical univocity. He contents himself with repeating and elucidating Aristotle's words.<sup>27</sup> As regards Avicenna, we are not aware that he ever made explicit reference to it in his writings. In fact, the first thinker I am aware of who mentions logical univocity is Alexander of Hales. In his commentary on the above-mentioned text of the *Metaphysics*, Alexander says that although corruptible and incorruptible bodies do not have a common physical genus, they nevertheless have a common logically univocal one.<sup>28</sup> The reason he gives for this is that corruptible and incorruptible come under one "potential concept which can be drawn to diverse species."<sup>29</sup> He quotes no authority for saying this and gives no impression that he thinks himself to be saying anything novel. Albertus Magnus also mentions the logically univocal genus in the process of commenting upon the *Physics*. He says that you can give the same definition to different things if you define them by their common ideas and in abstraction from all differentiating characteristics that they might possess. Such a definition will be univocal.<sup>30</sup>

From the time of Alexander of Hales to the time that Fonseca wrote his commentary on Aristotle's *Metaphysics*, the logically univocal genus received an uncritical acceptance. In the system of Duns Scotus, conceptual univocity, which seems to be just another name for logical univocity,<sup>31</sup> assumed a fundamental importance. But with Fonseca the whole basis of the distinction is called into question. In the fifth book of the above commentary he asks the question "whether it is possible that something be a genus logically when it is not so physically."<sup>32</sup> His answer is that

although the intellect is so powerful that it apprehends in one simple concept the most distinct and disjointed things—namely, insofar as they make up some one thing, one either absolutely or after a certain

manner—even so, it can never conceive in a univocal concept, things which by their nature are only analogically similar.<sup>33</sup>

This conclusion is universal in its application. It applies not only to generic predication but to all cases of attempted univocity in the face of a real analogy.

He draws his conclusions from four basic arguments. The first one is that a concept cannot belong equally to two subjects unless they are equal in their possession of the given nature. Such a concept would not be predicated of them unless it represented their natures as being equal to one another.<sup>34</sup> The implication behind this latter statement is that *to represent* is to stand for a thing as it really is. The basis on which the argument rests is the Aristotelo-Thomistic principle that our ideas of things are produced by the things themselves<sup>35</sup> and also the principle that agents produce their own likenesses in their effects.<sup>36</sup> The conclusion follows that there cannot be a univocal idea common to two things unless they both have the same nature. The second argument maintains that “it implies a contradiction to make a univocal concept of substance, while making the substance itself

<sup>33</sup>“Dicendum est: etsi intellectus tantum vim habet, ut distinctissima ac disiunctissima etiam uno simplici conceptu apprehendat, nempe quatenus ea unum aliquid efficiunt, sive simpliciter, sive secundum quid; nunquam tamen concipere posse univoco conceptu quae analogice tantum natura sua conveniunt” (*ibid.*, p. 446).

<sup>34</sup>“Conceptus formalis non potest aequaliter participari, nisi cum natura per eum repraesentata, seu conceptus obiectivus aequaliter participatur: neque participatur nec praedicatur talis conceptus, nisi ratione eius, quod repraesentat. Quare si nulla datur substantia communis, quae ex aequo participetur a particularibus substantiis, nec conceptus quo illa apprehenditur, ex aequo ab eisdem participabitur” (*ibid.*, p. 445).

<sup>35</sup>“In nobis acquiritur [scientia] per hoc quod res imprimunt similitudines suas in animas nostras” (*De Ver.*, q.2, a.1) and “Voces sunt signa intellectuum, et intellectus sunt rerum similitudines” (*Summa Theol.*, I, q.13, a.1).

<sup>36</sup>“Cum enim omne agens agat sibi simile” (*Summa Theol.*, I, q.4, a.3).

<sup>37</sup>“... implicat ergo contradictionem facere conceptum substantiae vere uni-

vocum, et ipsam substantiam vere analogam” (*In v Metaphys. Arist.*, p. 445).

<sup>38</sup>“Non potest igitur conceptus formalis substantiae in communi sumptae univocus esse et genericus, si substantia in communi sumpta, univoca genusque non sit” (*ibid.*) and cf. St. Thomas: “Modus praedicandi proportionatur ipsis rebus de quibus fit praedicatio” (*In I Sent.*, d.19, q.4, a.2, ad 1).

<sup>39</sup>“Postremo, quia isto modo quem ponunt, facile erit omnes naturas univocas de medio tollere, solaque nomina et conceptus formales cum Nominalibus univoca facere: dicemus enim nomina hominis et animalis, et eorum conceptus formales esse univoca; ipsas vero hominis et animalis naturas esse analogas, et sic in caeteris omnibus” (*In v Metaphys. Arist.*, p. 445).

<sup>40</sup>“Nec satis intelligo quo sensu possit esse verum, dari commune genus logicum absque convenientia reali in una natura. . . . Nam omnis intentio generis, et abstractio univoca nostri conceptus fundatur in reali convenientia specierum sub genere contentarum, et ideo unitas universalis, quae concipitur in genere, supponit unitatem formalem ipsius naturae genericae” (*Disp. Metaphys.*, d.35, s.3, n.40).



analogous.”<sup>87</sup> The third argument is complementary to the first. While the first is based on the fact that concepts are formed through the causality of the things themselves, the third one stresses that they must represent things as they are. Fonseca says that “it is therefore not possible for the formal concept of substance, taken in its universal sense, to be an univocal and a generic concept, if substance in its universal sense is not univocal and is not a genus.”<sup>88</sup> What he emphasizes in these arguments is the direct connection between the meaning of a term and the thing as it really is. The fourth argument seems to be the converse of that used by Aristotle. The latter had argued that if you accept logically univocal terms, you make it possible to say that all equivocal attributes are univocal. Fonseca goes the other way and says that you could treat all natures as analogical, merely saying that their concepts are univocal. So the idea “man” would be univocal to all men, yet in reality their humanity would be only analogically common. Fonseca seems to suggest that a resemblance exists between this position and nominalism, insofar perhaps as, in each case, there is no longer any basis in reality for the common name or concept which is predicated.<sup>89</sup> But while Aristotle’s argument holds good, the same is not so evident in Fonseca’s case. If you say that there can be logically univocal terms, it does not seem to follow directly that all univocal terms must be logically so. Nevertheless, logical univocity does seem to leave the door open to some form of nominalism, or at least to something closely akin to it.

Although Fonseca was unique in his explicit rejection of logical univocity, it is interesting to note that Suarez expressed certain doubts about the matter. He protests,

Neither do I sufficiently understand in what sense it can be true that a common logical genus is given without a real community in nature. . . . For every generic idea and univocal abstraction of our concept is founded in a real community of species contained under the genus; and therefore the universal unity which is conceived in the genus supposes the formal unity of the generic nature itself.<sup>40</sup>

The great exponent of the Suarezian system in our own day, Pedro Descoqs, S.J., was prepared to admit that it “is not impossible” to say that generic

concepts are purely analogical both in fact and in concept.<sup>41</sup> The alternative is to say that they are univocal both in fact and in concept, but such a view would not seem to find much support in Scholastic philosophy.

<sup>41</sup>"On peut dire, il est vrai, que le concept générique d' 'animal' représente par analogie les différences elles-mêmes, mais à la condition qu'on ne le prenne plus comme univoque *secundum intentionem* et

qu'on le rende analogue *etiam secundum intentionem*: ce qui n'est pas impossible" (*Institutiones Metaphysicae Generalis* [Paris, 1925], p. 246).

## NOTES ON FOREIGN BOOKS

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*Augustia y Esperanza. Clave Teológica al Laberinto Filosófico de Nuestro Tiempo.* Barcelona: Herder, 1956. Pp. 379. Paper. By Marianus Müller, O.F.M. Trans. Miguel Oltra, O.F.M.

The original, *Verheissung des Herzens*, appeared in 1953. It is an amalgam of philosophy and theology justified by its author on the ground of references to St. Bonaventure and Duns Scotus. Charging that contemporary Catholic theology is intellectualistic and, to the extent that it follows Molina, naturalistic, the author maintains that the just desires of modern thought (for example, the existentialists) can be met only by a theology which is a *practical* wisdom. The polemics of the author seem at times to be more ardent than facts or logic would seem to warrant. That modern man desperately needs faith, hope, and love does not prove that theology must be practical, unless one were to confuse faith, theology, and preaching.

*Anima Mundi. La Filosofia di Guglielmo di Conches e la Scuola di Chartres.* By Tullio Gregory. Firenze: Sansoni, 1955. Pp. 294. Paper, 2500 lire.

This richly documented and careful study begins with a brief chapter on the life and writings of William of Conches. In three successive chapters, the author studies William's theology, his doctrine of the soul of the world and of individual souls, and his idea of nature. Through these chapters, the author also treats the ideas of other members of the school of Chartres. In the fifth chapter, he analyzes the cultural ideals of the school. The movement at Chartres differed in many different respects from that at Paris, and historians of the thought of the twelfth and thirteenth centuries will find in the present work valuable source material.

*Bilan et perspectives.* By Karl Jaspers. Trans. Hélène Naef and Jeanne Hersch. Bruges: Desclée de Brouwer, 1956. Pp. 260. Paper.

This present work is a translation of *Rechenschaft und Ausblick*, which appeared in 1951. It is a collection of essays, some of which were written as early as 1941. The topics are various: philosophy and science, the

European spirit, a new humanism, freedom, the danger of atomic warfare, the nature of philosophy, Jasper's own philosophy, Kierkegaard, evil in Kant, the prophet Ezechiel, Solon, and Goethe.

*Ciencia Moderna y Filosofía.* By Jose Maria Riaza, S.J. Madrid: La Editorial Catolica, 1953. Pp. xxxi + 756 + xvi (plates). 75 pesetas.

The purpose of this volume is to provide an adequate scientific background for students of philosophy and, in particular, to serve as a textbook for the "scientific questions" prescribed for the ecclesiastical degree of licentiate in philosophy. It contains sections on mathematics, physics, and chemistry. There is an ample bibliography (pp. xiii to xxxi).

The selection of materials is based on their pertinence for the course in the philosophy of nature, and the choice the author has made is excellent.

*Declarationes Magistri Guilelmi de la Mare, O.F.M., De Variis Sententiis S. Thomae Aquinatis.* Ed. Franz Pelster, S.J. "Opuscula et Textus, Series Scholastica." Munich: Aschendorff, 1956. Pp. 31. Paper.

The introduction gives a very brief history to serve as background for the present work; this is followed by the essential facts about William of Mare and the information concerning the present text. It is, as the author points out, the basis for the later and more elaborate controversies concerning Thomistic doctrines.

*Le Dieu des philosophes et des savants.* By Régis Jolivet. "Encyclopédie du Catholique au XXème Siècle," 1, No. 15. Paris: Librairie Arthème Fayard, 1956. Pp. 126. Paper, 300 fr.

This collection of small volumes is aimed at a reader of good general education but not necessarily having special competence in any particular field. The present volume should prove most valuable to this kind of reader.

For one thing, the author clearly realizes that belief in God rests on experience and is arrived at without the aid of formal reasoning. This "pre-scientific" knowledge is had by most persons; it is in a sense a "natural" knowledge and gives the sense of reality to our thoughts about God. Because most writers on natural theology make no effort to link the natural knowledge with demonstration of God's existence, the complaint is often made that philosophical knowledge of God is merely abstract and unreal.

Another special advantage of the present volume is its keeping in touch with contemporary views and problems, such as the current objections



against the very knowledge of God, problems of transcendence, creation, and the like.

**Ernest Renan.** By Jules Chaix-Ruy. Paris: Emmaneul Vitte, 1956. Pp. 514. Paper.

This study of Renan is an attempt to relate his life and his thought to each other. Without in any way reducing thought to circumstances or temperament, the author skillfully shows how Renan wrestled with an idea but masked his anxiety under the refinement which his age affected. Nevertheless, the present work is properly speaking a biography, not a philosophical study. But it is biography of a high order, especially valuable because little has been done in this field.

**Es El Arte Una Máscara Trágica?** By Luis Farré. Tucuman, Argentina: Universidad Nacional, n.d. Pp. 41. Paper.

This is a short lecture on art, or culture, given in May, 1955. The author tries to show that art, like philosophy, is an expression of the human spirit and that some of the peculiarities of modern art are due to the same basic attitudes that are expressed by existentialism and by the spirit of revolt.

**Gabriel Marcel, philosophe et dramaturge.** By Edgard Sottiaux. Louvain: Nauwelaerts; Paris: Béatrice-Nauwelaerts, 1956. Pp. 219. Paper.

This work is in two parts, first, an introduction to the thought of Marcel, then a commentary on two plays. The philosophy of Marcel is presented in terms of "communion"; and this is considered in three stages, first in its imperfect forms of community, then in profound reflection upon being in the meeting with another person, and thirdly in the communion with the Transcendent.

The two plays chosen for commentary are *Un homme de Dieu*, and *Le monde casse*.

**Historia de la Filosofía.** By Johannes Hirschberger. Trans. Martínez Gómez, s.j. Barcelona: Herder, 1954-1956. Vol. I, pp. xiv + 516; Vol. II, pp. viii + 566.

Hirschberger's text is a well known one, and the translator aptly qualifies it as more philosophical than historical. Purely biographical material is reduced to a minimum (on an average, half a page); bibliographies are

brief, six to ten of the most important secondary sources being listed for each author studied. In the main, the author is interested in the thought. In each case, he makes frequent references to the original texts on the basis of which he builds up his interpretation.

The author's own point of view about "perennial philosophy" is to be seen in the way in which he builds up a developing thread of thought from the pre-Socratics to the Renaissance (the contents of Volume 1). The second volume continues this effort, in connecting Descartes with his predecessors and showing how later thinkers developed from him. But post-Kantian thought is somewhat difficult to evaluate in these terms. Sometimes a historian is inclined to object to what seems a distortion caused by the tendency to systematize, yet in the main the author retains objectivity and balance.

The Spanish edition contains the material prepared by the author for the second edition of the German. The translator has indicated Spanish translations of secondary sources where they exist. He has also added two very valuable appendices, one on the history of Spanish philosophy, the other a bibliography of Spanish philosophy.

*Horizonte de la Metafísica Aristotelica.* By Salvador Gómez Nogales, S.J. "Estudios Onienses." Madrid: Ediciones Fax, 1955. Pp. 416. Paper.

This work is a doctoral dissertation submitted to the Gregorian University (Rome). In the first part, the author considers the historical development of the idea of a metaphysics from the Greeks to the moderns. In the second part, he takes up the various names which Aristotle himself used to refer to it, as well as the history and meaning of "metaphysics." In the third part, he takes up the Aristotelian meaning of *episteme*. In the fourth part, he gives the various designations made by Aristotle of the object of metaphysics. Then he considers the various solutions given in recent years to the problem set up by the Aristotelian terms. Finally, he indicates what his own solution is, indicating that Aristotle "insinuates" this solution. He holds that the metaphysics of Aristotle has three parts: etiology, in which we discover the existence of suprasensible causes of sensible things; then theology, which deals directly with the nature of God; thirdly, ontology, which passes from the perfections of God to the properties of being in general; only this last part is strictly scientific.

There are a lengthy bibliography (pp. 244-398) and detailed indices.

*Introducción a la Historia de la Literaturá Teológica de la Escolástica Incipiente.* By Arthur Michael Landgraf. Trans. Constantino Ruiz Garrido. Barcelona: Editorial Herder, 1956. Pp. 253. Paper.

The author has revised and enlarged his original *Einführung in die Geschichte der theologischen Literatur der Frühscholastic* (1948) for the present translation. The work, as is well known, has three parts. In the first, the author gives a general view of Scholasticism and its development and characteristics. In the second, he considers the different types of works written in the early Middle Ages. In the third, he takes up the formation of various "schools," around the masters St. Anselm of Canterbury, Bruno the Carthusian, Anselm of Laon and William of Champeaux, Abelard, Hugh of St. Victor, Gilbert de la Porrée, Magister Simon, Peter Lombard, Prepositinus, Odo of Ourscamp, Andrew of St. Victor, and William of Auxerre.

*Itinéraire de l'âme en elle-même.* By St. Bonaventure. Trans. with an introd. by Jean de Dieu de Champsecrét, with a commentary by Louis de Mercin, O.F.M. Cap. Blois: Librairie Mariale et Franciscaine, 1956. Pp. 355. Paper, 850 fr.

This translation of the work entitled in the critical edition *De Triplici Via* (and sometimes called *Incendium Amoris*) was first published in 1929, under the title *Les trois voies*. The introduction and commentary are new.

The book begins with a brief account (pp. 1-27) of St. Bonaventure's life and doctrine, in which the translator holds that St. Bonaventure's thought is the equal of St. Thomas's and more suitable to the present time. In the introduction to the work itself (pp. 29-117), the translator explains the "three ways" (purification, illumination, union) and devotes a great deal of attention to the Bonaventurian doctrine of contemplation and its relation to charity. The translation is preceded by a "Little Commentary" by an unknown author who is presumed to have been almost a contemporary of St. Bonaventure's (pp. 118-20).

The Commentary (pp. 197-352) concerns itself with theoretical and practical aspects of meditation, prayer, and contemplation.

*Les mardis de Dâr le-Salâm.* Sommaire MCMLIII. Ed. Louis Massignon. Paris: Vrin; 1956. Pp. 248.

This issue contains four very significant studies, which were first given in the form of conferences at the Center of Studies Dâr el-Salâm in Cairo. Louis Massignon considers the religious meaning of the last pilgrimage of Gandhi. Louis Gardet takes up culture and humanism, first in Indian

culture and then in the cases of Mohammedan and Christian humanisms; next, he considers Marxian man and, finally, the problem caused by the presence in our world of these four different humanisms, with their various similarities and differences. The Reverend Georges C. Anawati, O.P., summarizes the history of Arab medicine up to the time of Avicenna. Roger Arnaldez comments on theological controversies in Ibn Hazm of Cordova and Ghazali.

***Metafisica di Una Crisi.*** By Nunzio Incardona. Rome: Fratelli Bocca, 1955. Pp. 262. Paper, 2000 lire.

Incardona, a Christian Spiritualist, here takes up the existentialist theme of "crisis." The book begins with a discussion of morality from the view of man as spirit. Then, in the second chapter, there is a discussion of humanism, followed by a discussion of spiritual irony. The fourth chapter considers "crisis" as a category of existence, and the last chapter sets up the metaphysical foundations of "crisis" in the metaphysical experience of the ego.

***Die Natur des Menschen.*** By Georg Siegmund. Würzburg: Echter-Verlag, 1955. Pp. 167.

This book is a presentation of the philosophical view of man, Thomistic in orientation, as a background for understanding the nature and function of the healing arts. The main points stressed are the unity of man, the reality of the soul, and the importance of psychological health for bodily health. Perhaps the psychosomatic origins of all illness are overstressed. The author holds that germs do not invade the organism and that because of an unresolved conflict of desires germs instrumentally work to tear the organism down. Recent discoveries of the chemical basis of some psychoses would seem to indicate that there are no purely psychogenic illnesses. In spite of some exaggeration, however, there are some very provocative insights in this book.

***Die Ontologie der Kultur.*** By Otto Samuel. Berlin: Walter de Gruyter & Co., 1956. Pp. vii + 271.

The problem which the author sets himself is the question of "another world," whether it be a future life, a world of ideas, and so on. He thinks that those who have denied it have become positivists or materialists, and those who have affirmed it have become acosmists. He wants to find a way



of integrating both "worlds" into one universe. He considers that the way of doing this is by an analysis of culture, which discovers a "meontology," the "nonbeing" of spirit. In elaborating this notion, he makes use of Hegelian and existentialist notions.

Having set up his fundamental principle of the nature of spirit, the author first works about the problems of form (time and space) and then of content (the doctrine of the categories, of matter, substance, and the ego; physics, life, ethics, and theology).

*Le Pari de Pascal.* By Georges Bruent. Preface by Jean Mesnard. Paris: Desclée de Brouwer, 1956. Pp. 140. Paper.

The author first presents plates showing in reduced size the manuscript of the celebrated "wager." Then he gives a transliteration of the text, corrections and all. This is followed by a commentary and discussion, with a conclusion. Finally, he presents a text arranged typographically to bring out the relationship of the various paragraphs to each other.

The study is a model of its kind. The author has discovered in Pascal's language an equivocation, which he thinks may account for the wide variety of opinions concerning the value of this "argument." The expression, "to take a chance," seems to provide the same ambiguity; at any rate, the notions of "choice," "risks," and "wager" are all contained in the argument, and appeal now to the will, now to the intellect.

*Pierre Damien et la culture profane.* By J. Gonsette, s.j. Louvain: Publications Universitaires; Paris: Béatrice-Nauwelaerts, 1956. Pp. 104. Paper.

Though this is a brief study, it is a very valuable one. The author first considers the condition of secular culture in Damien's lifetime, and finds it to be not only shallow but also unreasonably self-confident; he maintains also that St. Peter Damien spoke only about culture and knowledge *in the concrete*, and his condemnations therefore do not have universal bearing. Next, the author examines the notion of "nature" in the early Augustinians, and shows that all of them considered nature, not in the sense of an intrinsic principle of activity, but rather as concrete historical fact due to the will of God. For this reason, their attitude to the divine omnipotence was bound to be different from that of anyone who had an Aristotelian notion of nature. The author concludes that, though St. Peter Damien often spoke infelicitously, he was not fundamentally an anti-intellectual but an Augustinian, deeply concerned with the contemporary situation of intemperate dialecticians.

*Psychologia Metaphysica.* By Paul Siwek, s.J. 5th ed.; Rome: Gregorian Univ. Press, 1956. Pp. xvi + 582. Paper.

This well-known and popular textbook has been revised and brought up to date both in content and in its bibliography. Among books of its kind, the text is noteworthy for its special attention to contemporary thought and a rather full consideration of objections.

*Psychologie der Persönlichkeit.* By Heinz Rempelin. 2d ed.; Munich: Ernst Reinhardt, 1956. Pp. 684. DM 22; paper, DM, 19.

This is a very detailed and inclusive textbook. It consists of three main parts: particular elements of personality (vitality, temperament, character, talent), particular types of personality, according to the various methods of classification, and the discovery of personality (means of investigation, tests, and so on). Because of its very inclusive nature, which does not adhere to any limited "school," the book provides a good general view and by means of its generous documentation will be of great value to both the philosophy of human nature and to ethics.

*Saint Augustin et le néoplatonisme.* By M. F. Sciacca. Louvain: Publications Universitaires; Paris: Béatrice-Nauwelaerts, 1956. Pp. 67. Paper, 65 fr. b.

This volume contains the lectures of the "Chair Cardinal Mercier" of the University of Louvain for 1954. Professor Sciacca, one of the foremost Catholic philosophers of Italy, shows how he conceives the relation between faith and reason in the case of St. Augustine. He maintains, first, that St. Augustine was a believer before reading the books of the Platonists but was able to understand and accept fully this faith only afterwards. Yet he interpreted rather than learned from Plotinus. Secondly, Professor Sciacca tries to show that St. Augustine's doctrine of man is not dualistic and that this correction of neo-Platonism was brought about by his Christian faith. Finally, he asserts that "Christian philosophy" is the medium between rationalism on the one hand and confusion of philosophy and faith on the other. Yet he does not seem to make a clear distinction between rational discourse founded on faith and that which is instructed by faith but not founded on it; probably this distinction would seem to him to be rationalistic.

*El Sentido de la Responsabilidad.* [By Juan Beneyto.] Bilbao: Universidad de Deusto; Burgos: Instituto Historico Juridico Francisco Suarez, 1955. Pp. 68. Paper.

This is a thematic summary prepared as a preliminary announcement and orientation for a seminar. But it contains some very useful suggestions and references. The first chapter presents the elements for a theory of responsibility, with many references to the theories of Arnaiz-Alcalde and Roberti. It is also concerned with social and political responsibility. The second chapter considers some theories about responsibility to be found in ancient philosophy and compares them with the Kantian theory. The third sets down the principles of Suarez, which according to the plan of the seminar will be taken as principles of solution.

*Théorie de l'assentiment.* By Antonio Rosmini. Trans. with introd. and notes by Marie-Louise Roure. Paris: Emmanuel Vitte, 1956. Pp. 210. Paper.

The text here translated is the first book of the three written by Rosmini under the title *Logica*. Its content can be seen from the titles of the four chapters, "The Nature of Assent," "The Norms Which Should Direct Man in Assent," "The Reason for Assent," and "The Causes Why Man Does Not Give the Assent Required by Reason or Gives It without Reason or against It."

There is a lengthy introduction (pp. 5-97), in which the translator gives a brief general outline of Rosmini's philosophy, a more detailed presentation of the whole logic, and a minute analysis of the first book. This introduction makes the present text of very great value for all students of Rosmini.

*La Trinité (livres VIII-XV).* *Oeuvres de Saint Augustin*, tome 16. Trans. P. Agaësse, s.j., with notes in collaboration with J. Moingt, s.j. Paris: Desclée de Brouwer, 1955. Pp. 706.

Since the first volume of the *De Trinitate* had already contained a lengthy introduction, the editors content themselves with a rather brief consideration of the method of St. Augustine and an outline of the contents of the second half of the work. In the introduction, an excellent point is made; namely, that this half of the work is just as theological, even though it employs an elaborate psychological reflection.

The text, as is usual in this series, presents the Latin of the Benedictine

edition with a French translation on facing pages. Notes to the text are given on pages 571-661. In addition to the two authors mentioned above, some of the notes are written by F. Cayré. The notes are philological, historical, philosophical, and theological, making the edition of great value to students. There are also five pages of bibliography and several sets of tables and indices.

***L'Universe leibnizien.*** By Joseph Moreau. Paris: Emmanuel Vitte, 1956. Pp. 256. Paper.

With the republication and translation of some of Leibniz's works, a small revival of interest in his philosophy has begun. The present study is a richly documented view of the whole system. In the first part, the author considers the early works, especially the first sketch of the Leibnizian metaphysics, the continuum, matter and spirit, and universal harmony. In the second part, the author takes up the instruments which Leibniz fashioned to develop his philosophy; the universal "characteristic," definition, the calculus, the criticism of Cartesian mechanics, and the substitution of force and of dynamics. In the third part, the final synthesis is considered: the relation between physical explanation and finality, the system of monads, the principle of reason, essence and existence, and nature and grace. The author holds that Malebranche and Spinoza both had important roles to play, though different ones, in Leibniz's development.

***L'Uomo Questo "Squilibrate". Saggio sulla Condizione Umana.*** By Michele Federico Sciacca. Rome: Fratelli Bocca, 1956. Pp. 331. Paper, 2500 lire.

Professor Sciacca is one of the foremost representatives of "Christian spiritualism." In the present work, he relates his basic view of spirit as act to the concerns of contemporary thought. In the first part, entitled "The Human Condition and Its Structure," he reflects on existence, which he considers to be the experience of being, the individual, the person, the ego; body and spirit, the experience of my body, "createdness" as the authentic vocation of man, and the relation of man to his fellows. In the second part, entitled "Moral Intelligence and Ethical Reason," he examines problems of value and goodness. (By "intelligence" Sciacca means the intuition of ideal being; by "reason," the knowledge and judgment about concrete beings in the light of intelligence.) In the practical order, "ethical reason" discovers particular obligations; but "moral intelligence" sees the fundamental, ideal goodness back of all particular goods.



*Utopía y Realidad en el Erasmismo Español.* By Octavio Corvalan.  
Tucumán, Argentina: Universidad Nacional, n.d. Pp. 41. Paper.

After a short introduction to indicate the general problem of the Spanish renaissance, the author considers the life and works of Alfonso de Valdés, with some illustrations of the influence of Erasmus in several of Valdés's dialogues.

### Chronicle (continued)

THE THIRTY-FIRST ANNUAL MEETING of the American Catholic Philosophical Association will be held April 23 and 24, 1957, at the Conrad Hilton Hotel in Chicago. The general theme of the discussions will be, "Ethics in Relation to Other Knowledges." The four major papers will be: "St. Thomas's Approach to Moral Philosophy," by Ignatius T. Eschmann, o.p. (Pontifical Institute of Mediaeval Studies), with the commentary by the Reverend George C. Reilly, o.p. (Catholic University of America); "Ethics and the Faith," by the Reverend James J. Doyle, s.j. (West Baden College), commentary by the Reverend Luke Burke, o.f.m. (St. Bonaventure University); "Ethics and Epistemology," by Elizabeth G. Salmon (Fordham University), commentary by William O'Meara (University of Chicago); and "Ethics and Natural Theology," by John A. Riedl (Marquette University), commentary by Bernard J. M. Boelen (Duquesne University). In addition there will be an evening meeting and round table discussions in the afternoons.

THE METAPHYSICAL SOCIETY OF AMERICA will hold its annual meeting at Indiana University, Bloomington, March 22 and 23, 1957. On Friday afternoon, there will be a panel discussion on "Substance, Process, and Being," by George K. Plochmann (Southern Illinois University), Albert W. Levi (Washington University), and Laurence J. Lafleur (University of Akron), with a commentary by Campbell Crockett (University of Cincinnati). Friday evening the presidential address, "The Problem of Being and Analogy," will be given by the Reverend George P. Klubertanz, s.j. (Saint Louis University), with the commentary by Werner Wick (University of Chicago). Saturday, the morning and afternoon sessions will be taken up with in-

dividual papers: "Ideology and Postulational Metaphysics," by William Oliver Martin (University of Rhode Island), commentary by Harold A. Durfee (American University); "The Nature of Spiritual Being" by William Carlo (St. John's University), commentary by the Reverend Robert F. Harvanek, s.j. (West Baden College); "Current Trends in British Philosophy," by John Wisdom (Cambridge University); "Heidegger's Ontology," by Thomas D. Langan (Saint Louis University), commentary by Wilfrid Desan (Kenyon College), and "The Ontological Status of Values," by Richard Barber (Tulane University), commentary by Leonard J. Eslick (Saint Louis University).

THE TWELFTH INTERNATIONAL CONGRESS OF PHILOSOPHY was announced for the first half of September, 1958, by the International Federation of Philosophical Societies. The Italian Philosophical Societies will be the host, and the meetings will be held at Venice, with one meeting at Padua. The three themes proposed for the plenary sessions are: "Man and Nature," "Liberty and Value," and "Logic, Language, and Communication." The deadline for communications on these themes, as well as for papers on other themes, will be the end of March, 1958. The Secretaries are Professor Mario Dal Pra of the University of Milan, and the Reverend Carlo Giacon, s.j., of the University of Messina; the address of the Secretariate is Via Donatello 16, Padua.

THOMAS D. LANGAN, *Saint Louis University*

*Social Foundations of Education.* By Harold Rugg and William Withers.  
New York: Prentice-Hall, 1955. Pp. 771.

Despite its nonsense—almost, in fact, *because* of it—this book is critically important, with grave implications. The superficiality of its analyses and their very scope (psychology, the physical sciences, economics, politics, education, are discussed at great length) bespeak the kind of “culture” contemporary man can expect in the *Neuzeit*. The included compendium of Western history—an encyclopedia in forty pages of all the errors that an educationist-formed scholarship can perpetuate—shows clearly the abandonment of an entire *Geschichte*, the tradition which stretches from Anaximander to Nietzsche. This proves that we are beyond Nietzsche, who saw himself as the final *deroulement* of that tradition and its death. It is dead now; the history no longer even has a meaning. The book’s textbook style is a more forceful assertion of the attitude of the *Neuzeit* than its author’s expressed disdain for a tradition that sought to render its young “merely literate” (pp. 17-18). The book’s propaganda tone and falsifications make of it an admirable example of the instruments needed within our schools to convert them finally into the institutions of social engineering envisioned by the new philosophers.

This is not “just another textbook.” Rather it is the kind of theoretical-practical instrument that is bound to determine the formation of the educational system and through it the entire American society in the next fifty years. It is a capital representative of the *Entwertung* of the modern nihilism. It itself represents and capitulates the breaking down of structures which, until the last century, had still managed to resist the long eroding of the ontological substance of the Greco-Christian tradition.

The authors, the philosophers of the brave new world, are practical men—economists, educationists (the more latinized form belongs only to the ancient “merely literate” tradition), social engineers. As they go about their task—the destruction of the educational structures of the old tradition and the erection of a new “social” educational system—they crash through old structures with abandon. Thus St. Augustine comes to receive his notion of the spiritual from Plato (p. 311); the Blessed Trinity is an example of

social thinking in the Middle Ages (p. 317); "the mediaeval conception of the world rules out change" (p. 315); Isadora Duncan and Frank Lloyd Wright find themselves equal creators of the aesthetic of the new society (p. 500); the school is substituted for life (p. 38). Life becomes the assurance of abundance, and the authors are "deeply concerned that the schools should be utilized in producing it" (p. 494). To this end freedom is important. In answer to the question, Why is the choice between freedom and security (that is, a totalitarian system) unnecessary? the philosophers respond that "freedom is essential to the greatest economic production" (p. 60). Newspeak is of course an important instrument in the *Entwertung* of the Greco-Christian tradition. The authors admit an "economic bias," but they promise to work deliberately to overcome it. The proponents of the liberal arts ("its result was a supposedly educated 'elite,' their minds stocked with half-developed skills, a smattering of knowledge in mathematics and languages, and half-baked generalizations from the orthodox interpretation of the sciences" [p. 496]) are characterized, in Newspeak, as "the Practical Men of business and politics" (p. 495), and the old tradition's structure of education is termed "the practical tradition and the conforming way." The progressive schools become, conversely, "creative and democratic" (p. 493).

The authors are actually at grips with a grave problem of the *Neuzeit*. They are uncomfortable at the prospect that the scientific *Technik* which has grown to monopolize the attention of man in the nihilistic time requires the revaluing of all things in the way all too clearly spelled out by the Marxists. This humanism, in which man, with *Technik* as an instrument, revalues everything in terms of economic production, apparently collides with the new philosophers' human desire to retain a certain personal freedom. The philosophers seek a compromise by replacing the force of an organizing economic police state with the subtler organizing power of "free" conviction. The schools will form the citizen of the "free" economic democracy into a self-disciplining economic agent, self-disciplining in the sense that he will voluntarily seek through democratic instruments of government to impose upon himself a stringent governmental economic and social control that will assure the delicate economic machine's continued absorption of the *Technik's* energetic output. Instead of the Soviet solution, which envisions a state run by a small group of social and economic engineers, the philosophers envision a democratic economic state in which *all* the citizens become social and economic engineers and therefore freely vote the Soviet controls.

But why bother? Because, respond the new philosophers, psychologically the "free" system works better; that is, assures a higher productivity (p. 60).



This can be illustrated by the role of minority groups. A small amount of dissent in a society acts as a germ for new ideas. Of course, dissent must be kept to a minimum. A truly productive society must be harmonious; that is, homogeneous, peopled by the "relatively well-adjusted, co-operative young men and women, liked by and enjoying their fellows—in short, fitting members of society" (p. 34).

It may also be that this notion of "freedom," though so obviously a parody on the Greco-Christian notion of a *homo liber*, simply rests in the spirits of the new philosophers as an unexpurgated remain of the olden time.

The reader who dismisses this book as mere nonsense is blind to two orders of facts and therefore a fortiori remains himself essentially hidden in the past. (a) This book originated in the most influential educational center in America, Columbia, is written by respected authorities, and will be used for the formation of the formers of teachers. (b) The *Entwertung* presupposed by the book, the reign of the *Technik*, has taken place, and therefore the problem posed—namely, how to form citizens of a democracy so that they will vote themselves into their places in the economic machine—is, given the *Entwertung*, a real problem. It is, therefore, not this book, but the *Neuzeit* itself which is in question.

This book only serves to symbolize the enormity of the task confronting those who find the conception of the *Neuzeit* insupportable. For those who cannot bear the weight of the dead God there is only one solution: He must be made to live again. This is not to be accomplished by hanging on to the large pieces of the old structure which have not yet been washed away by the pounding of the sea. They will shortly disappear. Instead there must be a return to origins, a restructuring, a revaluing of the revaluing. This is a large task. God cannot be brought back into the world by weak efforts and paltry means; He must be brought back by ways that will have the appearance of a revolution. In this perspective, the Messrs. Rugg and Withers are effective prophets of the doom that will precede.

RICHARD J. BLACKWELL, *John Carroll University*

*Philosophical Psychology*. By J. F. Donceel, S.J. New York: Sheed and Ward, 1955. Pp. xiii + 363. \$4.50.

The general introduction to Father Donceel's textbook presents a definition of philosophical psychology which determines both the content and

the format of the main body of the book. Philosophical psychology is understood as "the science of living bodies which interprets the data of experience in the light of metaphysical principles" (p. 2). By experiential data is meant our everyday experience, plus biology and experimental psychology. This means in effect that philosophical psychology is a synthesis of the natural science and the metaphysics of living bodies. This combination is defended on the basis that metaphysics studies noumenal reality (beings as they are in themselves) and science phenomenal reality (beings as they appear to our senses). It is not explained precisely how this Kantian distinction is meant, which results in increasing rather than solving the difficulty of synthesizing metaphysics and experimental psychology. The larger portion of the book is devoted to, first, an experimental and then a philosophical discussion of man's sense life, rational life, and personality. These parallel scientific and philosophical analyses are quite independent of each other and do not explain how these two distinct ways of knowing are or can be synthesized, as is the claim of the author.

Part of the difficulty in regard to this theory of the relations between metaphysics and experimental psychology arises from Father Donceel's explanation of human intellectual knowledge. The agent intellect produces its ideas from within itself by using the phantasm as a model. The phantasm does not have a causal influence, even *instrumentally*, because "the immaterial intellect cannot be influenced by a material phantasm" (p. 218). Hence, although sense data is as a matter of fact somehow necessary for intellection, intellectual principles are inborn, or, as Father Donceel prefers, virtually a priori. Although the author claims that the intellect can and does transcend the domain of the senses, the crucial question here, as with Kant, is how intellectual cognition of noumenal reality (metaphysics) is possible. Father Donceel is right in insisting that this theory of knowledge is not, strictly speaking, the teaching of Kant. It is also not the teaching of St. Thomas Aquinas.

JOHN E. CANTWELL, S.J., *Saint Louis University*

*Social Justice*. By William F. Drummod, S.J. Milwaukee: Bruce Pub. Co., 1955.

This book presents "a theory of social justice derived from an analysis of all that the encyclical *Quadregesimo Anno* says about the subject." It is introduced by a summary exposition of the field of justice, which is in-

tegrated around the point of the dignity of the human person. There is one defect in this chapter. The author says that "the common good . . . does take precedence over individual good. And it takes precedence in the sense in which it is a greater good. . . ." A careful reader will spot other words which put the individual on top. My complaint is that the author does not say more explicitly in what matters the common good prevails over the individual, and in what matters it does not.

The exposition of the meaning of social justice, which the author works out from the teachings of the encyclicals, is excellent. And his rejection of the view that social justice is legal justice is good; I think it is unfortunate that that idea, social justice is legal justice, ever occurred to anyone. But I think the author is wrong when he says that from the Encyclicals we can get the "exact meaning of 'social justice' . . . in its precise and technical sense." My reason is that in their Encyclicals the popes were not talking "by the books;" they did not intend to present a scientifically complete exposition of the virtue. They wrote and taught on the economic evils in the world and the cure of them. They showed that the situation was such that the true and correct handling of it was a matter of what they called social justice. The economic problems which the popes treated of were indeed material for that virtue, and the popes gave a solid, substantial, detailed exposition to prove that. But they simply did not touch the questions: what, speculatively, is the precise nature of the virtue, and what is the extent of its object. The answers to these questions were left to be worked out by the learned, professional men of the Church. And I think that the various theories about social justice which have been proposed, are a definite proof of that point.

The author begins his fourth chapter with the sentence "There is nothing new in the virtue of social justice as just defined [in the earlier chapters] except the name." That position is false. A new set of circumstances, the existence of a small number of "have's" and a great number of "have not's," had made very evident a new relation among men. I think the precise point of the whole question of social justice is that it is new matter, that the older moral theologians simply did not know of it, and so could not discuss it.

Again, in the next chapter, which is entitled "Obligations of Social Justice," the author is careful to state, "At this point it is suggested that none of the preceding is written in opposition to what has been called 'traditional doctrine.'" And again I say that until the moral theologians realize that "something new has been added," about which traditional doctrine knew nothing, they will be unable to handle the matters which belong to social justice. There is a new virtue here with its rights and obligations; these

must be fitted into the framework of the moral order that men live in.

Personally I find it annoying to read: ". . . both 'Rerum Novarum' and 'Quadragesimo Anno' following the teaching of St. Thomas . . .;" Christ and His Church do not follow any man, they lead.

In the last chapter of the book, "Social Justice and Social Organization," the author gives a very fine exposition of the method by which the goal of social justice is to be attained. It is so fine that I am surprised he did not come to see that other goods besides economic goods could be the object of the efforts of groups of men, that groups of men might well be obliged, as groups, to strive for those goods, and, consequently, that the virtue of social justice is not limited to economic goods alone.

J. REGINALD O'DONNELL, C.S.B., *Pontifical Institute of Mediaeval Studies*

*Petrus Abaelardus. Dialectica.* First Complete Edition of the Parisian Manuscript. By L. M. de Rijk, Ph.D. Assen: Royal van Gorcum, Ltd., 1956. Pp. xcvi + 637.

This is the first volume of a series entitled *Wijsgerige Teksten en Studies*, published for the "Antiquity and Middle Ages" section of the Philosophical Institute of the Royal University of Utrecht. The series is under the direction of Professors C. J. de Vogel and K. Kuypers. The volume marks an auspicious beginning. Too little is known about the history of logic and in particular of Abelard's place in its development. Yet for Abelard, logic not only played an important and dominant role but was necessary for the defence of the Catholic faith (p. 470, ll. 4-7). This, the first complete edition of Abelard's *Dialectic*, presents an occasion to pursue further the history of logic.

The edition has been prepared from the only known manuscript of the work, that of Paris, Bibliothèque Nationale, ms. latin 14614, which is, unfortunately, incomplete. It has not been possible to check the readings against those of the manuscript, but there is no suspicion that Dr. de Rijk has not carefully and correctly read the manuscript. Variations from the text, as established by V. Cousin, have been carefully noted; the readings of marginal corrections in the manuscript have often been adopted; many emendations, mostly by way of addition and suppression, have been introduced by the editor. In each case of emendation or choice of variant it is possible to defend the text of Dr. de Rijk, yet often the text of the manuscript could be defended equally well. When possible, the editor has



given the reader the sources of Abelard's work; these are mostly from Boethius.

The punctuation, always difficult, yet a signpost of interpretation, is generally quite acceptable. On page 81, line 3, delete the period after *quidem*; also line 17, insert a comma or semicolon after *quaedam*. On page 83, line 34, either insert a comma after *eorum* or delete the comma after *sunt*.

The orthography is standard: *cuiusdam* for *cujusdam*, and so on. On page 81, line 30, we find *dirivatum*. Why not *deriuatum*? One wonders why the work is entitled *Petrus Abaelardus Dialectica* instead of *Petri Abaelardi*, and so on, as in Cousin's edition.

The introduction, written in English, contains a short notice on Abelard's life and works, his sources, and an analysis of his logical theory. The volume concludes with three sets of indices: *index locorum*, *nominum*, *verborum et rerum*.

The volume is well printed. There are very few misprints. On page ix, note 4, read *Parisius* instead of *Parisios*. Incidentally, the edition of the *Historia Calamitatum* in Migne's *Patrologiae Cursus Completus* is far from the best. See also the misprints on pages ix, note 4; xvi, note 5; xx, line 6. There are also a few expressions somewhat unusual in English, notably on page xxxii, line 24.

In spite of these few remarks there can be no doubt that the work has been competently done. Congratulations are due Dr. de Rijk, the general editors, and the printers.

JOSEPH DE FINANCE, S.J., *Gregorian University*

*Existence et Vérité*. By Albert Cartier. Presses Universitaires de France. Pp. 253.

This book is a study of Blondel's first *Action* in relation to today's existential problematic.

Father Cartier rightly observes that even Christian existentialists like Gabriel Marcel, owing to their insistence on the impossibility of the subject's separating himself from his own situation, risk being no longer able to save the universal validity of truth. And he maintains that the philosophy of Blondel, especially that which is presented in the thesis of 1893, offers a solution to this difficulty, while at the same time accepting whatever is legitimate in the existential evaluation of subjectivity with complete justice.

The author is thus led, after an introductory chapter on the "existential problematic," to examine in turn the threefold reconciliation in the dialectic of Blondel: freedom and necessity, liberty and truth, and existence and truth.

It is well known that the outcome of this dialectic is the tension between the "will willing" and the "will having willed." But the "will willing"—Father Cartier insists upon this—ought not be conceived as a subconscious tendency, a psychological act alongside of or below other acts, but rather as a "transcendental condition" of all will activity. The option which Blondel, at first glance, seems to place only on the end of the dialectic process, is in reality immanent in each one of its movements. It is only to reflexion that it appears to be the end, because it is the last to be "recovered." But it was there from the beginning and the dialectic advance was possible because of it alone.

The author sets himself to show how this option remains rational, however, even though its rationality appears only to the one who achieves it. The difficulties, in his opinion, come from a too rigid distinction between intelligence and volition, and, in intellectual activity itself, between the logical, objective connection and affirmation. Is such an explanation fully satisfying? It deserves, at any rate, to be taken into consideration. It is beyond doubt that in sharpening the distinction between the elements of reality unduly, one multiplies pseudoproblems and as a result multiplies errors. It is an error to judge an aspect or an element of an action as a concrete and complete action.

Very interesting also are the considerations of the author on the "phenomenalism" of Blondel; that is to say, on the distinction he carefully maintains between the "action" itself and the idea of the action, and in consequence between the "scientific" objective study of the implications of action and the existential affirmation of that which appears so implied, what is possible only by option. According to Father Cartier, Blondel, in 1893, unconsciously still remained a prisoner of the rationalistic problematic and imagined that by such a methodical dissociation it would be possible to obtain in a "scientific" manner a general agreement on the demands of action, with freedom intervening only to go from a theoretical viewpoint to an affirmation of existence. But this was to misunderstand that in the course of even "scientific" study, liberty is already active. Blondel himself was quick to realize what was unsatisfying in his position, but, instead of correcting his phenomenalism in the second edition of *Action* (1937-38), he preferred to renounce it. Father Cartier considers this a concession. It would have been possible, according to him, to develop a "consistent phenomenalism"—of which the last part of the book offers us an

outline—which alone is capable of reconciling existential thought with intellectual philosophy.

One can examine the conclusion and still feel ill at ease before certain pages of *Action*, but everyone will agree in recognizing the mastery of the author in explaining and exposing the subtle and deep thought of a great Christian philosopher. This book should be read by all those who are interested in the philosophy of Blondel and in the present currents of Christian thought.

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*Bergsonian Philosophy and Thomism.* By Jacques Maritain. Translated by Mabelle L. Andison and J. Gordon Andison. New York: Philosophical Lib., 1955. Pp. 383. \$6.00.

This book is a translation of the first book Maritain ever wrote, *La Philosophie Bergsonienne, Etudes Critiques* (1913; 2nd French Edition, 1929; reprinted in 1942). Bergsonian philosophy did for Jacques Maritain what Platonic philosophy did for St. Augustine: freed him from materialism and brought him to the threshold of Christian philosophy and theology. Four or five years after this development when he had taken a further step to discover that St. Thomas freed him from Bergson and carried him across that threshold, Maritain wrote two articles (1912) and gave a series of lectures at the Catholic Institute in Paris (1913) which were incorporated into this first book. Although most of its contents appeared before the publication of Bergson's later works, especially *The Two Sources of Religion and Morality* (1932), Maritain added to the original collection an "Essay in Appreciation" (1940) which considers these developments. Hence, the work as a whole is still a valuable study and critique of Bergson's philosophy and the author himself justifies its reappearance in English translation on the grounds that it is "probably a fair-to-middling account of basic Thomistic philosophy" and still has historical interest as well.

Moreover, because Maritain was concerned over the bursts of youthful ardor which forty years ago spotted the work with a tone and style somewhat severe and unjust, he wrote a fifty page preface to the second edition, included with this translation, which makes delightful and instructive reading. Therein even the general reader can gain many an insight into both the saintly character of Maritain and the perennial strength of his philosophy. And since the historical background of the science-philosophy relation

which explains, partially at least, the philosophy of Bergson as well as Maritain's rejection of this philosophy, is still part of our situation and background today, his work of analysis and criticism in this volume is of contemporary value.

Whether he knew it or not, Bergson's commitment to a philosophy of pure change was more a reaction against what his immediate predecessors in modern European philosophy had done to "essentialize" metaphysics and separate it from the concrete reality of our ever-changing world than against a genuine philosophy of being itself. Every philosopher can profit by the careful distinctions Maritain draws between the Bergson of fact and the Bergson of intention. This critique is a good example of how to consider and pay tribute to the genius and insight of a thinker while at the same time keeping track of error or inadequacy.

Technically, the focus of Bergsonian philosophy centers in a critique of the concept and consequent theories of being and knowledge which result—or are implied. Maritain's preface alone is a good summary of the points at issue and a handy guide to the suspicions of those who regard conceptual knowledge as a falsification of the real.

In the practical order, because of "spineless eclecticism" on the part of some Catholic philosophers, Bergson's philosophy of becoming had serious repercussions in theology, where his theory of the concept empties the dogmas of revealed religion of their content and furnishes Modernism an artistic intellectual foundation that can be quite compelling. Because of further consequences for the relations between intellect and will, Bergsonian intuition and philosophy of Duration also bear on certain recent types of "existential morality."

Maritain, in this early and powerful manifestation of what would later be the important role of the Catholic lay philosophy in modern Christian philosophy, delights the reader with that combination of technical proficiency and sensitive awareness of the larger issues of life which have won him his niche of fame in the history of contemporary philosophy.



## SEMIOTIC AND A THEORY OF KNOWLEDGE

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The present article is a chapter from a projected book,  
to be called *Symbol and Existence: A Study in Meaning*.

A student of current philosophies of science must sooner or later become aware of a curious state of affairs. If he is accustomed to the discipline and unity of a particular science, he may reasonably expect that a philosophy of science will in turn confer a larger unity on the elements of the scientific enterprise, not merely the various data of the sciences but also the conclusions and the activities of the scientists themselves. This is not, however, what he will find. What he is more apt to encounter in the various symposia and encyclopedias of unified science is an inveterate division of subject matters. Some may be written entirely in one language and some entirely in the other; some may be a mixture of both; but neither seems to have much to do with the other. The two approaches are (1) the nomothetic method with which he is familiar, arising from the "inexpugnable belief," as Whitehead put it, "that every detailed occurrence can be correlated with its antecedents in a perfectly definite manner exemplifying general principles";<sup>1</sup> and (2) the quite different program which Russell, after completing the *Principia Mathematica*, staked out for philosophy as its sole concern—the logical analysis of empirical propositions established by perception and science.<sup>2</sup>

To take the most ambitious and interesting example of a "meta-science," semiotic, the science of signs—interesting because, unlike pure symbolic logic, it tries to unite logical analysis with the explanatory enterprise of science, and because, whatever its shortcomings, it has at least hit upon the fruitful notion of man as the sign-using animal—here too one encounters the same division of subject matters

with no visible means of getting from one to the other, despite the many assurances that semiotic confers unity. If one expected a larger epistemological unity in which the relation of logical analysis to the scientific explanation of natural events is to be made clear, he will be disappointed. He will get logical analysis and he will get scientific theorizing, but he will not learn what one has to do with the other.<sup>3</sup> There are studies on the biology of sign-function, and here one recognizes a basic continuity with the manifold of natural phenomena. When one speaks of animal *A* responding to buzzer *B* by salivation in expectation of food *F*, one is speaking a language familiar to psychologist, physiologist, and physicist alike, the language of spatio-temporal events which lend themselves to causal hypothesis. Stimulus-and-response events occur among natural existents and are mediated by physical structures and a causal nexus which is recognized as valid for organic and inorganic matter.<sup>4</sup> Thus, whatever the limitations of

<sup>3</sup>Alfred North Whitehead, *Science and the Modern World* (New York: Macmillan, 1950), p. 18.

<sup>4</sup>Bertrand Russell, *Our Knowledge of the External World*, pp. 4 ff.

<sup>5</sup>"Languages are developed and used by living beings operating in a world of objects, and show the influence of both the users and the objects. If, as symbolic logic maintains, there are linguistic forms whose validity is not dependent upon non-linguistic objects, then their validity must be dependent upon the rules of the language in question" (C. W. Morris, *Int. Encyc. of Unified Science* [Univ. of Chicago Press, 1955], p. 66). Characteristically, semioticians do not find it remarkable that sign-using animals should have developed symbolic logic "whose validity is not dependent on non-linguistic objects." It is therefore not worth investigating how this could have come about but only necessary to note that it has and to define this unusual activity as the "syntactical dimension" of semiotic.

<sup>6</sup>Nor should one be confused by the encyclopedists' disavowals of determinism in favor of the probability approach, which is supposed to resolve the nomothetic-ideographic dichotomy of object-science and history (cf. Egon Brunswik, "The Conceptual Framework of Psy-

chology," *Int. Encyc. of Unified Science*, p. 696). For, as becomes abundantly clear, the laws of probability are relied upon quite as heavily as strict causality (cf. Friend and Feibleman, *What Science Really Means* [London: Allen & Unwin, 1957], p. 180). As Nagel insists, although laws connecting micro-states may be statistical in character, that does not mean that laws connecting macro-states are not strictly deterministic (Ernest Nagel, "The Causal Character of Modern Physical Theory," *Readings in the Philosophy of Science* [New York: Appleton-Century-Crofts, 1953], p. 437).

<sup>7</sup>For example, the methodological negation of mental entities and the inability to take account of Gestalt qualities. (See G. P. Klubertanz, S.J., "The Psychologists and the Nature of Man," *The Nature of Man*, [Proceedings of Amer. Catholic Phil. Assoc., 1951], p. 70).

<sup>8</sup>Charles Morris, *Signs, Language and Behavior* (New York: Prentice-Hall, 1946), p. 19.

<sup>9</sup>Charles Morris, *Int. Encyc. of Unified Science*, p. 86.

<sup>10</sup>Campbell Crockett, "The Short and Puzzling Life of Logical Positivism," *THE MODERN SCHOOLMAN*, xxxi (January, 1954), 91.

a biological science of signs in man and animals,<sup>6</sup> one readily recognizes its validity as far as it goes. But then one suddenly finds oneself in the charged atmosphere of the Polish semanticists with their scoldings at the human *abuse* of signs. At one moment one is studying sign behavior as a natural science in which "interpreters" behave according to lawful empirical regularities and in the next moment as a quasi-ethical science in which "interpreters" disobey semantical rules and in general behave stupidly and perversely. There will also be articles dealing exclusively with syntactical rules in logic and mathematics, with the arbitrary formation of calculi, with the principles of logical implication. Or one may read statements by the same semiotician that (1) the basic terms of semiotic are all formulable in terms applicable to behavior as it occurs in an environment,<sup>6</sup> and (2) semiotic can be presented as a deductive system with undefined terms and primitive sentences which allow the deduction of other sentences as theorems.<sup>7</sup>

The fact is that a man engaged in the business of building a logical calculus is doing a very different sort of thing from an animal (or man) responding to a sign, and it is a difference which is not conjured away by ignoring it or by leaping nimbly from *res extensa* to *res cogitans* as though there were no epistemological abyss in between. I cannot say it as well as Professor Crockett: "I do not know whether one should try to describe the universe or whether one should play games with marks arranged according to certain rules; but I do know that one should decide which of these vastly different kinds of activities one is engaged in and inform the reader accordingly."<sup>8</sup>

It is not my intention to make a case against either of the two major components of semiotic, symbolic logic and behavioristics—the shortcomings of each are well known by now. Rather it is my hope to show that a true "semiotic," far from being the *coup de grace* of metaphysics, may prove of immense value inasmuch as it validates and illumines a classical metaphysical relation—and this at an empirical level.

I think it will be possible to show (1) that the "unified science" of semiotic is a spurious unity conferred by a deliberate equivocation

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of the word "sign" to designate two generically different meaning-situations (the sign-relation and the symbol-relation) and (2) that an open "semiotical" analysis of symbolization—that is, one undertaken without theoretical presuppositions—will encounter and shed light upon two metaphysical relations: the first, the cognitive relation of identity by which a concept, a "formal sign," comes to contain within itself *in alio esse* the thing signified; the second, the relation of intersubjectivity, one of the favorite themes of modern existentialists. It may well turn out that the semiotician has good reason to ignore the symbol-relation in view of his dictum that sign analysis replaces metaphysics, since an impartial analysis of symbolization can only bring one face to face with the very thing which the semiotician has been at all pains to avoid—a metaphysical issue.

Let us not be too hasty in surrendering the symbol to the symbolic logician or, as is sometimes done, to the mythist.<sup>9</sup> It is possible that a purely empirical inquiry into the symbol-function, an inquiry free of the dogmatic limitations of positivism, may provide fresh access to a philosophy of being.

## I. Syntax and Science

Semiotic, the science of signs, is an attempt to bring together into

<sup>9</sup>"This is the last word of symbolism; it is the last word because symbolism moves in the order of univocal concepts, concepts which are merely given an 'analogical' reference by the mind; and through univocal concepts one can never acquire any proper and formal knowledge of reality as such, because reality as such is analogical. Follow the *via symbolica* as far as you like; follow it as far as it goes; it will never lead beyond agnosticism, either in metaphysics or theology" (James F. Anderson, *The Bond of Being* [St. Louis: Herder, 1954], p. 226).

<sup>10</sup>Roy Wood Sellars, "Materialism and Human Knowing," *Philosophy for the Future* (New York: Macmillan, 1949), p. 94.

<sup>11</sup>C. W. Morris, *Int. Encyc. of Unified Science*, pp. 84-85. "It will be convenient to have special terms to designate certain of the relations of signs to signs, to objects, and to interpreters. 'Implicates' will be restricted to Dsyn, 'designates' and

'denotes' to Dsem and 'expresses' to Dp. The word 'table' implicates (but does not designate) 'furniture with a horizontal top on which things may be placed,' designates a certain kind of object, denotes the objects to which it is applicable, and expresses its interpreter."

Note the ambiguity of the term "expresses its interpreter." "Implicates," "designates," and "denotes" are purely semantical-syntactical terms with no biological analogue. But what are we to take "expresses" to mean? Is it to be taken in the biological sense of a sign "announcing" its significatum to its interpreter or in the symbolic sense of "expressing a meaning"?

<sup>12</sup>*Ibid.*, p. 121.

<sup>13</sup>Such as, for example, *Philosophy for the Future*, "The Quest of Modern Materialism" (New York: Macmillan, 1949).

<sup>14</sup>Cf. Maurice Cornforth, "Logical Empiricism," *Philosophy for the Future*, p. 518.



the formal unity of a single science three separate disciplines: (1) the semantical rules by which symbols are applied to their designata, (2) the logical analysis of the relations of symbols as they appear in sentences, and (3) the natural science of behavioristics (to use Neurath's terminology), in which organisms are studied in their relation to the environment as it is mediated by signs. It was soon discovered, as Sellars points out, that the limitation of scientific empiricism to logical syntax is suicidal; and so the semantical and biological study of signs was added under the guidance of C. W. Morris.<sup>10</sup> According to Morris, these three disciplines may be regarded as three "dimensions" of the same science, the semantical dimension of semiotic, the syntactical dimension, and the pragmatic dimension.<sup>11</sup> This division is held to be analogous to the division of biology into anatomy, ecology, and physiology;<sup>12</sup> a symbolic logician, a semanticist, and a behaviorist are said to be emphasizing different aspects of the same science. Physiology requires anatomy and ecology requires both; all three conform admirably to the biologist's conception of organism as a system reacting to its environment according to its needs of maintaining its internal milieu and reproducing itself. Physiology is complemented by anatomy; one flows into the other without a hitch. But how does syntactical analysis flow into behavioristics? One may make a syntactical analysis of the sentences written down by a behaviorist, or one may study the sign responses of a symbolic logician; but in what larger scheme may the two be brought into some kind of order? We find symposia written from either point of view, from the physicalist's, who starts with matter and its interactions and tries to derive mind therefrom,<sup>13</sup> or from the symbolic logician's, who conceives the task to be the syntactical investigation of the language of science. Far from the one flowing naturally into the other, the fact is that one has very little use for the other. It takes the encyclopedist to bring them together.

It is well known that logical empiricism is without a theory of knowledge since it restricts itself to an abstract theory of the logic of language.<sup>14</sup> It is equally well known—and perhaps one is a consequence of the other—that the history of logical empiricism is the

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history of wide fluctuations on the mind-body axis.<sup>15</sup> Examples of the extremes are the solipsism of Mach, Wittgenstein, and the early Carnap of *Der logische Aufbau* and the physicalism of the American behaviorists and the later Carnap. But even in the more modern attempts at unity, one is aware of the tendency to construe the field exclusively from the logical or the physicalist point of view—and indeed, how can it be otherwise when the problem of knowing is ruled out of court? A semiotician can easily take the position that the only genuine problem, as Carnap claimed, is one of logical analysis; that is, the question of the formal relations among the concepts that describe the data of first-person experience, the concepts of physics, and those of behaviorist psychology.<sup>16</sup> Or one can begin at the other end with the causal relations between signs and interpreters and derive mind and consciousness with never a thought for syntactical analysis.<sup>17</sup> Anatomy is indispensable to physiology, but syntax can get along very well without neurology. Neither symbolic logicians nor behaviorists are constrained to make contact with each other, and it is perhaps proper that they do not. But it is the semioticians who have brought them willy-nilly together to form the new organon. It is not unreasonable, therefore, to expect that this metascience will provide a larger order. Perhaps, then, it is the semanticists who fill the gap.

<sup>15</sup>Herbert Feigl, "The Mind-Body Problem in the Development of Logical Empiricism," *The Philosophy of Science* (New York: Appleton-Century-Crofts, 1953), pp. 614 ff.

<sup>16</sup>*Ibid.*, p. 615.

<sup>17</sup>See, for example, Mead's *Mind, Self, and Society* (Chicago: Univ. of Chicago Press, 1952).

<sup>18</sup>Rudolf Carnap, *Introduction to Semantics* (Cambridge: Harvard Univ. Press, 1948), p. 9.

<sup>19</sup>Morris, *Int. Encyc. of Unified Science*, p. 101.

<sup>20</sup>Alfred Korzybski, *Science and Sanity* (Lakeville, Conn.: International Non-Aristotelian Library Pub. Co., 1952).

<sup>21</sup>*Ibid.*, p. 386.

<sup>22</sup>Alfred Tarski, "The Semantic Conception of Truth," *Phil. and Phen. Research*, iv (1944), 375 ff.

<sup>23</sup>For example, in answer to the charge

that his "Snow is white" sentence seems to imply a naive realism when it lays down the condition "if and only if snow is white," he writes: ". . . the semantic definition of truth implies nothing regarding the conditions under which a sentence like (1) *snow is white* can be asserted. It implies only that, whenever we assert or reject this sentence, we must be ready to assert or reject the correlated sentence (2): the sentence 'snow is white' is true.

"Thus we may accept the semantic conception of truth without giving up any epistemological attitude we may have had; we may remain naive realists, critical realists, or idealists—whatever we were before. The semantic conception of truth is completely neutral toward all these issues" (*ibid.*, p. 361).

<sup>24</sup>Rudolph Carnap, *The Unity of Science* (quoted by Cornforth in *Philosophy for the Future*, p. 510).

For semantics professes to deal with both the words of the logicians and the natural objects of the scientist.

We are destined to disappointment. Semantics, it turns out, abstracts from the user of language and analyzes only the expressions and their designata.<sup>18</sup> Like syntax it operates from the logical pole in that it is chiefly concerned with formation of "rules" for the application of symbols to things.<sup>19</sup> Korzybski, we discover, is not interested in how it is that words get applied to things, in the extraordinary act of naming, but only in our perverse tendency to use words incorrectly,<sup>20</sup> and in making a "structural differential" so that one may use words with the full knowledge of the level of abstraction to which they apply.<sup>21</sup> Or if we turn to Tarski's classic paper on the semantic conception of truth with high hopes that at last we have come to the heart of the matter, we will find as the thesis of the article the following criterion of "material adequacy": *X is true if, and only if, p is true*, which when interpreted yields: "*Snow is white*" is true if, and only if, *snow is white*.<sup>22</sup> I do not wish to deny the usefulness of Tarski's criterion within the limits he has set; I only wish to point out that Tarski by his own emphatic asseveration is not concerned with the problem of knowing.<sup>23</sup>

If, in order to bring the twain together by the semiotic method, we strain forward to the farthest limits of behaviorism and backwards to the earliest take-off point of semantics, we will find that the gap between them is narrow but exceeding deep. Logical syntax begins *with* the "protocol statement," the simplest naming sentence; semantics is exclusively concerned with its rules of designation. In regard to the logical syntax of the language of science, Carnap wrote: "Science is a system of statements based on direct experience and controlled by experimental verification. . . . Verification is based on *protocol statements*." Protocol statements are "statements needing no justification and serving as the foundations for all the remaining statements of science."<sup>24</sup>

Behavioristics, even taken at its own estimation, brings us to a point considerably short of the relation of denotation and the protocol sentence. It deals with the sign behavior of animals and man according

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to the method of natural science—that of discerning empirical regularities and later attributing them to a causal function,  $a=f(b)$ . An organism's response to a stimulus is resolvable into a sequential series of commotions mediated by structures, beginning with an air vibration and ending with an efferent nerve discharge into a glandular end-organ.<sup>25</sup>

An object-science of behavior can only make sense of language by trying to derive it from some refinement of sign-response. As Susanne Langer has pointed out, when the naming act is construed in these terms, when the situation in which you give something a name and it is the same for you as it is for me, when this peculiar relation of denotation is construed in terms of stimulus-response, one has the feeling that it leaves out the most important thing of all.<sup>26</sup> What is left out, what an object-science cannot get hold of by an intrinsic limitation of method is nothing less than the relation of denotation—*a name above all denotes something*.<sup>27</sup> If you say "James" to a dog whose master bears that name, the dog will interpret the sound as a sign and *look* for James. Say it to a person who knows someone called thus, and he will ask, "What about James?" That simple question is forever beyond the dog; signification is the only meaning a name can have for him.<sup>28</sup>

The upshot is, even if we go no farther than Mrs. Langer, who is otherwise in sympathy with the positivism of the semioticists, that in

<sup>25</sup>Nor does the Gestaltist, for that matter, take us an inch closer to the mysterious act of naming. By his concept of field forces and perceptual wholes, he can make sense of molar phenomena which escape the behaviorist. He can arrive at certain traits of configuration which apply alike to chickens and humans (see for example the Jastrow illusion in Koffka's *Gestalt Psychology*, p. 32). But neither the behaviorist nor the Gestaltist has anything to say, indeed does not wish to have anything to say, about the naming act. The very methodology of an object-science precludes its consideration of an object-sentence as such, perhaps for no other reason than that the object-science takes place within the very intersubjective nexus which attends language. (Cf. Marcel: "Without doubt

the intersubjective nexus cannot in any way be asserted; it can only be acknowledged. . . . I should readily agree that it is the mysterious root of language" [*The Mystery of Being*, II, 10]).

<sup>26</sup>Susanne K. Langer, *Philosophy in a New Key* (Mentor Books, 1953), p. 51.

<sup>27</sup>*Ibid.*

<sup>28</sup>*Ibid.*, p. 50.

<sup>29</sup>Continuity "is the absence of ultimate parts in that which is divisible." It is "nothing but perfect generality of a law of relationship" (Charles S. Peirce, *Collected Papers*, VI, 172-73).

<sup>30</sup>Charles S. Peirce, "Logic as Semiotic: The Theory of Signs," *Philosophical Writings* (Dover, 1955), p. 99.

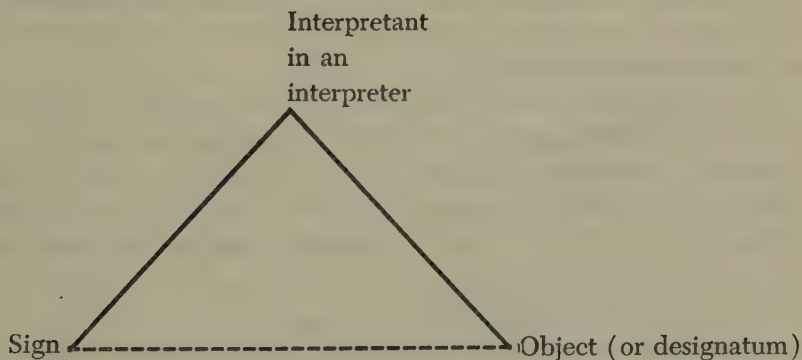
<sup>31</sup>Morris, *Int. Encyc. of Unified Science*, p. 82.



semiotic symbol-analysis and the science of sign-behavior are brought willy-nilly together into a unity which has no other justification than that both have something to do with "sign." No larger sanction can be forthcoming because of the dictum that sign analysis replaces metaphysics. To say to a semiotician that he is confusing the logical with the real is unacceptable to him because of the "metaphysical" presuppositions involved. One might nevertheless expect that, within the limits of the semiotical method, some attempt might be made to achieve the continuity so highly prized by semioticians since the time of Peirce.<sup>30</sup> Failing this, one cannot help wondering whether to do so, to explore the gap between pragmatics and symbol analysis, will not run squarely into an "extra-semiotical" relation—not as a "metaphysical presupposition" or a "naive realism" but as an issue which is precisely arrived at by the semiotical method itself.

## II. Sign and Symbol

Semiotic uses as its basic frame of reference the meaning triad of Charles Peirce.<sup>30</sup>



Its three components are sign, interpretant, and object. The "interpretant" in man is equivalent to "thought" or "idea" or, in modern semiotical usage, to "takings-account-of".<sup>31</sup> The interpretant therefore implies an organism in which the interpretant occurs, the interpreter. The virtue of the triadic conception of the meaning-relation is that it is conformable with the biological notion of stimulus-response, in

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which the sign is equivalent to a stimulus, the conditioned response to the interpretant, and the designatum to the object of the response.

The triad can be looked at in either its biological (pragmatical) or its logical dimension. That is to say, it can be conceived either as a causal relation obtaining between natural existents and mediated by neural structures, sound waves, and so on; or it can be viewed syntactically-semantically. Thus, in the biological dimension, the buzzer (sign) has no direct relation to the object (food); whereas in the semantical dimension the word (sign) has the direct relation of designation with the object, precisely insofar as it is specified by a semantical rule to designate the object. Syntactics has to do with the logical relation which one sign bears to another.

The semioticians, however, when they speak of the meaning-relation as it is taken to occur among natural existents whether human or subhuman, regardless of whether they are speaking of the pragmatical or semantical dimension, always assume that it is a causal sequential event.<sup>32</sup> They are careful to use *response* instead of *conception* or *thought* or *idea*.<sup>33</sup> Even in Ogden and Richards' variation of Peirce's triad, in which the terms "symbol" and "thought" (or "reference") and "referent" are used, it is stated that "between a thought and a symbol causal relations hold."<sup>34</sup>

We may therefore express the basic semiotic relation in terms of the simple biological triad (represented in the diagram, page 235).

Between the sign and organism, organism and object, "real"<sup>35</sup> causal relations hold. The line between sign and object is dotted because no real relation holds but only an imputed relation, the semantical

<sup>32</sup>I use the word "causal" unprejudicially, to mean whatever the reader would take it to mean in the context. It does not matter for the argument whether one interprets this cause as efficient causality or as a probability function.

<sup>33</sup>"... terms gain relations among themselves according to the relations of the *responses* of which the sign vehicles are a part, and these modes of usage are the pragmatical background of the formation and transformation rules" (Morris, *Int. Encyc. of Unified Science*, p. 95).

<sup>34</sup>C. K. Ogden and I. A. Richards, *The Meaning of Meaning* (Harcourt, 1953),

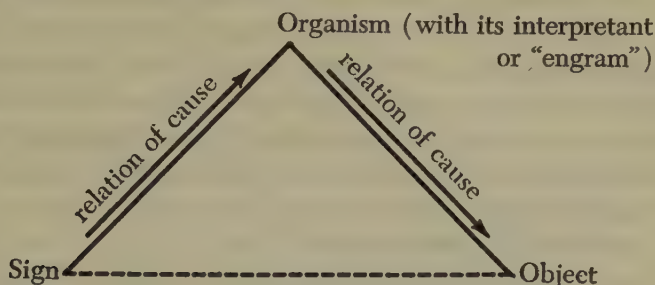
p. 10.

<sup>35</sup>*Ibid.*, p. 12.

<sup>36</sup>See *ibid.*; also Stuart Chase, *The Tyranny of Words*; Alfred Korzybski, *Science and Sanity*.

<sup>37</sup>It is irrelevant that in the case of thunder announcing rain, the thunder happens to have a real connection with the rain-process. The same relation of signification could be made to take place in a deaf organism by using a blue light to announce rain. Thus, to use St. Augustine's nomenclature, whether the sign is natural or conventional, the mode of response is the same.

relation of designation. A major doctrine of the semanticists is that most of the difficulties which thought encounters come about through the imputation of a real relation where only a semantical one exists."



One knows at once what Ogden and Richards mean by *real* even though latter-day semioticists would avoid the term. Signification occurs as a material happening among natural existents, from the sound of the buzzer to an electro-colloidal change in the dog's brain to glandular secretion. There is, however, no such "real" relation between sign and object."

Two considerations arise in connection with the semiotic theory of meaning. The first is simply this: If the semioticists insist on giving a biological account of the meaning-relation as it is taken to occur among natural existents (human organisms, words, things), what account are they prepared to give in these terms of the imputed and logical relations which occur in semantics and syntax? If the semantical relation between sign and designatum is not "real," then what is its status? Is its status settled by the nominal device of calling it an "imputed" relation? Is it simply "wrong" as one might gather from the semanticists? The answer is not forthcoming. One simply speaks in one breath of concepts as "responses" and in the next of the logical relations between concepts. This treatment is, as we have seen, ambiguous. Either it can mean that the semantical-syntactical relation stands in so obvious a continuity with sign behavior that nothing more need be said about it; or it may mean that of course it is "mental" and has nothing to do with sign behavior and that it goes without saying that the Cartesian dualism of *res extensa* and *res cogitans* prevails. In any case, it is unsatisfactory to be required to shift attention with-

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out further ado from the great corpus of natural science to an "unreal but imputed" relation. It would not seem unreasonable to ask what one is to make of this queer relation in terms of a "unified science."

The second consideration, and one which on investigation leads to such unexpected consequences, has been raised, not by a hostile critic of semiosis, but by an erstwhile symbolic logician. There is something wrong, writes Susanne Langer, about regarding the word-symbol as a sign and a conception as a response.<sup>38</sup> Since the notion of meaning as signification in the narrow sense, as a response, "misses the most important feature of the material,"<sup>39</sup> *what is this feature and what are its epistemological consequences?*<sup>40</sup>

What is this most important feature which is left out by a causal rendering of meaning? It is, of course, the relation of denotation as opposed to signification. To give something a name, at first sight the most commonplace of events, is in reality a most mysterious act, one which is quite unprecedented in animal behavior and imponderable in its consequences. The semioticians are obliged by method to render symbol as a kind of sign. Morris defines a symbol as a sign produced by its interpreter which acts as a substitute for some other sign with which it is synonymous.<sup>41</sup> Thus, in a dog, hunger cramps can take the place of the buzzer in the control of the dog's behavior: "Hunger cramps might themselves come to be a sign (that is, a symbol) of food

<sup>38</sup>*Philosophy in a New Key*, p. 51.

<sup>39</sup>*Ibid.*

<sup>40</sup>If we had hoped that Mrs. Langer would follow up the epistemological consequences of this most important insight into the non-causal character of symbolic meaning, we shall be disappointed. She drops it quickly, restates her allegiance to positivism and goes on to the aesthetic symbol as the form of feeling. (See *Feeling and Form*.)

<sup>41</sup>*Sign, Language, and Behavior*, p. 25.

<sup>42</sup>*Ibid.*

<sup>43</sup>*Ibid.*, p. 28.

<sup>44</sup>For example, she had understood the word "water" (spelled into her hand) but only as a sign to which she must respond by fetching the mug, drinking the water, and so on. The significance of her discovery that this *is* water may be judged from the fact that having discovered what water was, she then wanted to know what

everything else was (*The Story of My Life*, p. 25). (Cf. also the experiences of Marie Huertin, Lywine Lachance, and the well-authenticated account of Victor, the wild boy of Aveyron, who discovered the symbol *despite* every attempt of his positivist teacher to present it as a sign of a want [Langer, *Philosophy in a New Key*, p. 97].)

<sup>45</sup>Ernest Schachtel, "The Development of Focal Attention and the Emergence of Reality," *Psychiatry*, November, 1954; p. 309. "These considerations cast some doubt on the adequacy of Freud's theory of the origin and nature of thought . . . According to Freud thought has only one ancestor, the attempt at hallucinatory need-satisfaction . . . I believe that thought has two ancestors instead of one—namely, motivating needs, and a distinctively human capacity, the relatively autonomous capacity for object interest" (*ibid.*, p. 318).



at the customary place."<sup>42</sup> Although we may sympathize with Morris's purpose, not to disqualify "mind," but simply to advance semiotic as a science,<sup>43</sup> the fact remains that this is an extraordinary use of the word "symbol"—certainly it has nothing to do with denotation. It is the relation of denotation, as Mrs. Langer points out, which has been completely overlooked. The question is this: Can denotation be derived by a refinement of behavioral reaction, or is it something altogether different? Can any elaboration of response issue in naming? Why is it, we begin to wonder, the semioticians refuse to deal with symbolization, excepting only as it is governed by semantical rules?

That symbolization is radically and generically different from signification is confirmable in various ways. There is the sudden discovery of the symbol in the history of deaf-mutes, such as the well-known incident in which Helen Keller, who had "understood" words but only as signs, awoke to the extraordinary circumstance that the word "water" meant, denoted, the substance water.<sup>44</sup> There are the genetic studies of normal children, as for example the observation of Schachtel who speaks of the "autonomous object interest" of young children as being altogether different from the earlier need-gratification interest.<sup>45</sup> Symbolization can be approached genetically, as the proper subject of an empirical psychology; or it can be set forth phenomenologically, as a meaning-structure with certain irreducible terms and relations.

Let us first take notice of the gross elements of the symbol meaning-situation and later of the inter-relations which exist between them.

### III. The Second Organism and the Relation of Intersubjectivity

What happens, then, when a sign becomes a symbol; when a sound, a vocable, which had served as a stimulus in the causal nexus of organism-in-an-environment, is suddenly discovered to *mean* something in the sense of denoting it?

It will be recalled that the relation of signification is a triadic one of sign-organism-object (see the diagram above). This schema holds true for any signficatory meaning-situation. It is true of a dog responding to a buzzer by salivation; it is true of a polar bear responding to the sound of splitting ice; it is true of a man responding to a

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telephone bell;<sup>40</sup> it is true of little Helen Keller responding to the word "water" by fetching water. The essential requirement of signification is that there be an organism in an environment capable of learning by effecting an electrical-colloidal change in the central nervous system and as a consequence responding to a stimulus in a biologically adaptive fashion.<sup>47</sup>

It is important to realize that whereas signification often occurs between two or more organisms, it is not essential that it should, and that generically the sort of response is the same whether one or more organisms are involved. The action of a dog in responding intelligently to the bark or feint of another dog—Mead's "conversation of gesture"<sup>48</sup>—is generically the same sort of meaning-relation as that in which a solitary polar bear responds to the sound of splitting ice. It is the *environment* to which the organism responds in a biologically adaptive fashion, and the mode of response is the same whether the environment consist of other organisms or of inorganic nature.

Only a moment's reflection is needed to realize that the minimal requirement of symbolization is quite different. By the very nature

<sup>40</sup>It is also true of a human responding to the shout "Fire!" in a crowded theatre (Mead's example in *Mind, Self and Society*). Here, characteristically, the semiotist confuses symbol and sign by citing human signifiatory responses as illustrative of human meaning in general. One may indeed *respond* to a word and in this respect our understanding is similar to Helen's understanding of signs prior to her discovery of the symbol and, in fact, generically the same as a dog's response to a spoken command. But it is an altogether different situation when a father tells his child that this *is* fire, and the child awakes to the fact that by this odd little sound of *fire* his father means this leaping flame.

<sup>47</sup>It does not matter for the present purpose that some intelligent responses are acquired by conditioning and that others are congenital dispositions of the organism. The learned response of the dog to the buzzer and the innate response of the chick to the sight of grain are both explicable in physico-causal terms as an event in an electrico-colloidal system. (See the "IRM," the Innate Response Mechanism in John Bowlby's "Critical Phases in the De-

velopment of Social Responses in Man," *New Biology*, 14 [Penguin Books, 1953]).

<sup>48</sup>*Mind, Self and Society*, p. 43.

<sup>49</sup>If there is a natural wisdom in etymologies, perhaps this is a case of it—for *conceive*, one suddenly realizes, means "to take *with*."

<sup>50</sup>George Mead, the great social behaviorist, clearly perceived that language and mind are essentially social phenomena. We owe a great deal to his prescience that the interpersonal milieu is of cardinal importance in the genesis of mind, even though he felt compelled to render this relation exclusively in behavioristic terms for fear of "metaphysical" consequences (it is clear that by "metaphysical" he meant anything airy and elusive). It is typical of his integrity, however, that even with his commitment to behaviorism, he did not shrink from mental phenomena and consciousness, and in fact attempted to derive consciousness from social interaction.

Having realized that language is an interpersonal phenomenon, however, he set himself the impossible task of deriving the symbol from a stimulus-response sequence. For since it was an article of faith with

of symbolic meaning, there must be *two* "organisms" in the meaning-relation, one who gives the name and one for whom the name becomes meaningful. The very essence of symbolization is an entering into a *mutuality* toward that which is symbolized. The very condition of my conceiving the object before me under the auspices of a symbol is that you name it for me or I name it for you. The act of symbolization requires another besides the hearer; it requires a namer. Without the presence of another, symbolization cannot conceivably occur because there is no one from whom the word can be received as meaningful. Robinson Crusoe writing in his diary after twenty years on the island is nevertheless performing a through-and-through social act. *The irreducible condition of every act of symbolization is the rendering intelligible; that is to say, the formulation of experience for a real or an implied someone else.*

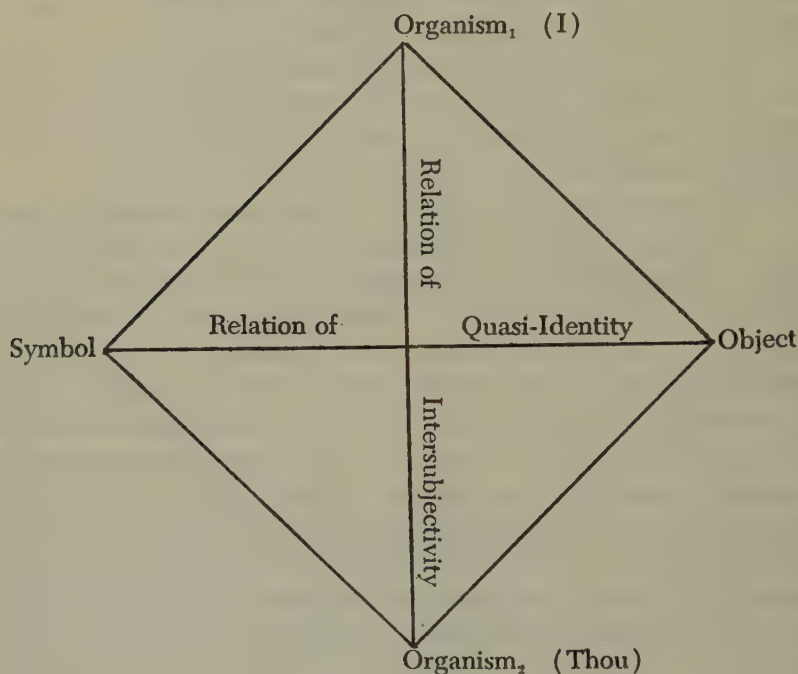
The presence of the two organisms is not merely a genetic requirement, a *sine qua non* of symbolization; it is rather its enduring condition, its indispensable climate. Every act of symbolization, a naming, forming an hypothesis, creating a line of poetry, perhaps even thinking, implies *another* as a co-conceiver,<sup>49</sup> a co-celebrant of the thing which is symbolized. Symbolization is an exercise in intersubjectivity.

A new and indefeasible relation has come into being between the two organisms in virtue of which they are related not merely as one organism responding to another, but as namer and hearer, an I and a Thou. Mead's two dogs quarrelling over a bone exist in a conversation of gesture, a sequential order of gesture and counter-gesture. But a namer and a hearer of the name exist in a mutuality of understanding towards that which is symbolized. Here the terminology of object-science falls short. One must use such words as mutuality or intersubjectivity, however unsatisfactory they may be. But whatever we choose to call it, the fact remains that there has occurred a sudden co-intending of the object under the auspices of the symbol, a relation which of its very nature cannot be construed in causal language.<sup>50</sup>

Is it possible, then, that an unprejudiced semiotic may throw some light on the interpersonal relation, the I-Thou of Buber, the intersubjectivity of Marcel? As things stand now, the empirical mind can make very little of this entity "intersubjectivity," and the behaviorist

nothing at all. Like other existential themes, it seems very much in the air. Yet an empirical approach to the genesis of symbolization is bound to reveal it as a very real, if mysterious, relation. Perhaps the contribution of a new semiotic will be that intersubjectivity is by no means a reducible, or an imaginary, phenomenon but is a very real and pervasive bond and one mediated by a sensible symbol and a sensible object which is symbolized.<sup>51</sup>

We may therefore revise the sign triad as the symbol tetrad:



him that the explanatory science of behavioristics is the only hope of approaching mind, he could not do otherwise than render symbolization as a response. As a consequence, he is obliged to define a symbol as the kind of sign which "calls out" the same response from the speaker as from the hearer. This definition drives him into the absurdity of saying that a word can only mean the same thing for you and me if it provokes the same response from you and me. Thus, if I ask you to get up and fetch the visitor a chair,

it must follow that I also arouse in myself the same tendency to get up and fetch the chair (*Mind, Self, and Society*, p. 67). Clearly, as Mrs. Langer noticed, something is wrong here.

Is it possible, we wonder, that Mead was right in his emphasis of the social bond, but mistaken in construing it behavioristically?

<sup>51</sup>Hocking writes of intersubjectivity as a direct unmediated bond from which mind and language arise: "... without the direct experiential knowledge of 'We are,'



The "organisms" no longer exist exclusively in a causal nexus but are united by a new and noncausal bond, the relation of intersubjectivity.

But a new relation has also arisen between the object and its symbol. What is the nature of the "imputed relation of identity"?

#### IV. The Intentional Relation of Identity

Mead said that a vocal gesture (sign) becomes a symbol when the individual responds to his own stimulus in the same way as other people respond.<sup>52</sup> Yet one cannot fail to realize that something is amiss in construing as a response Helen Keller's revelation that this is water. And certainly it misses the peculiar representative function of language to declare that, when I ask you to do something, I also arouse in myself the same tendency to do it.<sup>53</sup>

What, then, is changed in the semiotic relation by Helen Keller's inkling that this *is* water? Physically, the elements are the same as before. There is Helen; there is Miss Sullivan; there is the water flowing over one hand, and there is the word spelled out in the other. Yet something of very great moment has occurred. Not only does she have the sense of a revelation, so that all at once the whole world is open to her, not only does she experience a very great happiness, a joy which is quite different from her previous need-satisfactions (see Schachtel's "autonomous object interest" above), but immediately after discovering what the water *is*, she must then know what everything else *is*.

The critical question may now be raised. In discovering the peculiar denotative function of the symbol, has Helen only succeeded in opening Pandora's box of all our semantical ills of "identification," or has she hit upon the indispensable condition of our knowing anything at all, perhaps even of consciousness itself?<sup>54</sup> Is her joy an "hallucinatory need-satisfaction," an atavism of primitive word-magic; or is it a purely cognitive joy oriented toward being and its validation through the symbol?

It comes down to the mysterious naming act, this *is water* (the word spelled out in her hand). Here, of course, is where the trouble starts.

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For clearly, as the semanticists never tire of telling us, the word is *not* water. You cannot eat the word "oyster," Chase assures us; but then not even the most superstitious totemistic tribesman would try to.<sup>55</sup> Yet the semanticists themselves are the best witnesses of the emergence of an extraordinary relation—which they deplore as the major calamity of the human race—the relation of an imputed identity between word and thing. Undoubtedly the semanticists have performed a service in calling attention to the human penchant for word-magic, for reifying meanings by simply applying words to them. Gabriel Marcel frequently speaks of the same tendency of "simulacrum" formation by which meanings become hardened and impenetrable to thought. Yet one wonders if it might not be more useful to investigate this imputed identity for what part it might play in human knowing, rather than simply deplore it—which is after all an odd pursuit for a "scientific empiricist."

To awake to the remarkable circumstance that something has a name is neither a response nor an imputed real identity. No one believes that the name is really the thing, nor does the sentence "This is water" mean this. Then what is the relation? It might clarify mat-

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the very ideas of 'sign,' 'language,' 'other mind,' itself could not arise" (William E. Hocking, "Marcel and the Ground Issues of Metaphysics," *Phil. and Phen. Research*, xiv [June, 1954], 453).

Yet one might wonder whether it is not the other way around—whether the relation "We are" does not arise through a mutual intending of the object through its symbol, the word which you give me and I can say too. It would perhaps be more characteristic of angelic intelligences to experience such an immediate intuitive knowledge rather than a knowledge mediated by sensible signs and objects. (See Walker Percy, "Symbol as Hermeneutic in Existentialism," *ibid.*, xvi [June, 1956], 526).

<sup>52</sup>*Mind, Self, and Society*, p. 67.

<sup>53</sup>*Ibid.*

<sup>54</sup>Cf. her comment on pre-symbolic thought: "... if a wordless sensation may be called a thought" (*The Story of My Life*, p. 25).

<sup>55</sup>In regard to primitive identification, Oliver Leroy writes: "The logic of a

Huichol (who mystically identifies stag with wheat) would be deficient only on the day when he would prepare a wheat porridge while he thought he was making a stag stew" (*La raison primitive*, p. 70). Yet in some sense, the symbol is identified with the thing, a sense, moreover, which is open to superstitious abuse.

<sup>56</sup>Cf. Langer, *Philosophy in a New Key*, p. 49.

<sup>57</sup>*Quid est illud in signato conjunctum signo, et praesens in signo praeter ipsum signum et entitatem ejus? Respondetur esse ipsummet signatum in alio esse.* "What may be that element of the signified which is joined to the sign and present in it as distinct from the sign itself? I answer: No other element than the very signified itself in another mode of existence" (John of St. Thomas, *Logic*, II. P., q. 21, a. 6; trans. Jacques Maritain).

<sup>58</sup>Jacques Maritain, "Sign and Symbol," *Ransoming the Time* (New York: Charles Scribner's Sons, 1948), p. 222.

ters to eliminate the mysterious copula, leaving the sentence, "This: water." Or even more simply, eliminate the word "this," leaving a pointing at and a naming (in semiotic language, an indexical sign plus a symbol). In its essence the making and the receiving of the naming act consists in a coupling, an apposing of two real entities, the uttered name and the object. It is this *pairing* which is unique and unprecedented in the causal nexus of significatory meaning. But what is the nature of this pairing? The two terms, it is clear, are related in some sense of identification, yet not a real identity. To express it in modern semiotical language, the water is conceived through the vehicle of the symbol.<sup>56</sup> In Scholastic language, the symbol has the peculiar property of containing within itself *in alio esse*, in another mode of existence, that which is symbolized.<sup>57</sup> Helen knows the water *through* and by means of the symbol.

The word is that by which the thing is conceived or known. It is, in Scholastic language, an intention. The Scholastics speak of concepts as "formal signs," intentions whose peculiar property it is, not to appear as an object, but to disappear before the object.<sup>58</sup> But here we are not dealing with concepts or mental entities. We are dealing with natural existents, the object and the vocable, the sound which actually trembles in the air. It is this latter which is in some sense intentionally identified with the thing. Or rather the thing is intended by the symbol. Perhaps much of the confusion which has arisen over the "identification" of the symbol with its designatum could have been avoided by an appreciation of the phenomenological (and Scholastic) notion of intentionality and by distinguishing real identity from the intentional relation of identity.

An interesting question arises in connection with the intentional function of the symbol. Is it possible that the symbol is a primitive precursor of the concept or "formal sign" of the Scholastics? The latter contains its object in an intentional mode of existence, *in alio esse*. *But so in an extraordinary fashion does the sensuous symbol.* In cases of false onomatopoeia, the symbol is transformed intentionally to imitate the thing symbolized (for example, *crash*, *glass*, *limber*, *furry*, *slice*, and so on). The word *glass* bears no resemblance to the thing glass. Yet it actually seems to transmit a quality of brittleness, glossi-

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ness, and so on. The fact is that a symbolic transformation has occurred whereby the drab little vocable has been articulated by its meaning.<sup>59</sup>

The semanticists supply a valuable clue by their protestations. Confronted by a pencil, Korzybski says, it is absolutely false to say that this is a pencil; to say that it is can only lead to delusional states. Say whatever you like *about* the pencil, but do not say that it is a pencil. "Whatever you say the object is, well, it is not."<sup>60</sup> The pencil is itself unspeakable. True; but insofar as it remains unspeakable—that is, unvalidated by you and me through a symbol—it is also inconceivable. Clearly the semanticists are confusing an epistemological condition with a true identity.

How does it happen, Cassirer asked, that a finite and particular sensory content can be made into the vehicle of a general spiritual "meaning"?<sup>61</sup> And we know his answer. It is the Kantian variant that it is not reality which is known but the symbolic forms through which reality is conceived. Yet the empirical approach belies this. An empirical semiotic deals with natural existents and takes for granted a lawful reality about which something can be truly known. Even a strict behaviorist operates publicly in a community of other knowers and data to be known; he performs experiments on real data and publishes papers which he expects other scientists to understand. What account, after all, can Cassirer or any other idealist give of in-

<sup>59</sup>"The natural sound element has been taken up into and practically disappears from our consciousness in its significant symbolic connotation. In other words the natural sounds have been completely transmuted into conventional sound symbols" (R. A. Wilson, *The Miraculous Birth of Language* [New York: Philosophical Lib., 1948], p. 220).

One can establish this transformation to his own satisfaction by a simple experiment. Repeat the word "glass" many times; all at once it will lose its symbolic guise, its "glassiness," and become the poor drab vocable that it really is. Yet it is from its original poverty that its high symbolic potentiality derives. It is for this reason, as Mrs. Langer says, that a vocable is very good symbolic material, and a peach very poor.

<sup>60</sup>*Science and Sanity*, p. 35.

<sup>61</sup>Ernst Cassirer, *Philosophy of Symbolic Forms*, Vol. 1: *Language* (New Haven: Yale Univ. Press, 1953), p. 93.

<sup>62</sup>Frederick D. Wilhelmsen, "The Philosopher and the Myth," *THE MODERN SCHOOLMAN*, xxxii (November, 1954), 40.

<sup>63</sup>Marcel observes that when I ask what is this strange flower, I am more satisfied to be given a nondescriptive name than a scientific classification. "But now we find the real paradox—the first unscientific answer (it is a lupin, it is an orchid) which consisted in giving the *name* of the flower, although it had practically no rational basis, yet satisfied the demand in me which the interpretation by reduction tends . . . to frustrate" (*The Mystery of Being*, II, 13).



tersubjectivity? If it was, according to Kant, a "scandal of philosophy" in his day that no satisfactory solution could be found to the problem of intersubjectivity, is it any less a scandal now? But a broad semiotical approach can only bring one into the territory of epistemological realism. Since we do not know being directly, Wilhelmsen writes, we must sidle up to it; and at the symbol-object level, we can only do this by laying something of comparable ontological status alongside.

Existence is attained immediately in the judgment; but judgments necessarily entail the use of phantasms, and, except in direct judgments of existing material things, the phantasms employed are symbolic. The philosopher must go through phantasm to reach being.<sup>22</sup>

Perhaps it would be truer, genetically speaking, to say that the primitive act of symbolization, occurring as it does prior to conception and phantasm, consists in the application, not of the phantasm, but of the sensuous symbol to the existing thing. A being is affirmed as being what it is through its denotation by symbol.<sup>23</sup> Is it not possible that what I primarily want in asking *what* something is, is not an explanation but a validation and affirmation of the thing itself as it is—a validation which can only be accomplished by laying something else alongside: the symbol?

We might therefore reverse Korzybski's dictum: It is *only* if you say what the object *is* that you can know anything about it at all.

The symbol meaning-relation may be defined as not merely an intentional but as a co-intentional relation of identity. The thing is intended through its symbol which you say and I can repeat, and it is only through this quasi-identification that it can be conceived at all. Thus it is, I believe, that an empirical and semiotical approach to meaning illumines and confirms in an unexpected manner the realist doctrine of the union of the knower and the thing known. The metaphysical implications of semiotic are clear enough. Knowing is not a causal sequence but an immaterial union. It is a union, however, which is mediated through material entities, the symbol and its object. Nor is it a private phenomenon—rather is it an exercise in intersubjectivity in which the Thou serves as an indispensable col-

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league. Both the relation of intersubjectivity and the intentional relation of identity are real yet immaterial bonds.

To render human cognition physico-causally can only end in the hopeless ambiguity of current semioticists who must speak in two tongues with no lexicon to translate, the language of the scientist who deals with signs as natural existents and the language of the formal logician who deals with the syntactical relations between signs.

The intentional relation of identity is not only the basic relation of logical forms, as Professor Veatch has pointed out;<sup>64</sup> it is also the basic relation of symbolization. No wonder, then, that the symbolic logician has no use for it—for once the intentional character of knowing is recognized, “so far from being independent of metaphysics or first philosophy, [it] necessarily presupposes it.”<sup>65</sup>

<sup>64</sup>Henry Babcock Veatch, *Intentional Logic* (New Haven: Yale Univ. Press, 1952).

<sup>65</sup>*Ibid.*, p. 18.

### What Is the Starting Point of Metaphysics?

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#### I. Introduction: *Ens Commune* and Immateriality

The traditional definition of metaphysics, coming from Aristotle, is that it is the science of being *qua* being.<sup>1</sup> Since it is proposed as a wisdom embracing *all* being in its material object, its formal object—that which precisely makes all beings an object of metaphysical enquiry with respect to the causes and principles of their very being—cannot be limited and restricted to a determinate category of being. That which causes something *to be in a way not common to all beings* cannot, therefore, be a metaphysical cause or principle of being as such.

The very word “metaphysics,” therefore, implies a consideration of causes and principles in some way transcending the physical order of explanation. The metaphysician is seeking a more ultimate explanation of real things than can be provided by natural sciences dealing only with material entities in terms of their mobile and sensible being, as subject to becoming and change. Physical things, as material, are indeed subject to becoming and change; but is this materiality, which is the root of their mobility, the intrinsic principle which also constitutes them as actually existing beings? For a materialism, the answer would be affirmative; then the question must be raised as to whether materialism is a *meta*-physical position, or, indeed, if materialism be true, whether metaphysics is possible at all.

Aristotle, in a famous passage from Book VI of the *Metaphysics*, tells us that

if there is no substance other than those which are formed by nature, natural science will be the first science; but if there is an immovable substance, the science of this must be prior and must be first philosophy, and universal in this way, because it is first. And it will belong to this to consider being *qua* being—both what it is and the attributes which belong to it *qua* being.<sup>2</sup>

This classic text seems to make the very existence of a science of metaphysics which is really distinct from physics dependent upon first proving

the existence of spiritual and immaterial entities. Whether metaphysics is so dependent and whether it is even possible to demonstrate spiritual realities prior to the existence of metaphysics—these are questions we will consider later. But what are the basic assumptions behind this text? Physics deals with movable beings existing separately (as substances exist), while mathematics deals with objects abstracted from matter and motion, although incapable of existing apart from matter and motion. Beings as considered in the physical sciences are neither intelligible apart from matter and motion, nor can they exist save in a material, changeable way. Mathematical entities are intelligible and definable in formal abstraction from motion and matter, but they are not themselves substances and hence lack separate existence. Metaphysics, consequently, is only distinguished from other theoretical sciences if it is dealing with things which both exist and are intelligible in separation from matter and change.

But precisely why, it may be objected, must an ultimate explanation of the very being of *everything which is* be found only on the level of immaterial or spiritual being? Is metaphysics at its outset committed by its very nature to varieties of idealism? Is the possibility of metaphysics not only dependent upon establishing somehow, some way, the existence of immaterial beings, but even upon an idealistic denial of the reality of matter or at least upon an insistence that matter in physical beings is metaphysically unintelligible and irrelevant? Certainly neither Aristotle nor St. Thomas could be called an idealist. Neither of them doubted the real, substantial existence of physical things. And in common with most thinkers, ancient and modern, who have ever talked about metaphysics, they assumed that such a science, if it existed, must have for its material object everything which is, without exception. A science which deals only with some special kind or class of being to the exclusion of all others is not metaphysics, whatever else it might be. If the formality under which *all* beings are to be considered is such that some really existing beings fall outside the scope of that formality, then the formal object so used is improperly metaphysical. As Lewis Hahn has remarked, the starting point should not be such as to beg the question against the options provided by major metaphysical positions. To define at the outset metaphysical being in such a way as to exclude the real existence or possibility of either material *or* immaterial beings would seem to be such a begging of the question.

Nevertheless, there are powerful exigencies which seem to call for some

<sup>1</sup>This paper was given at the colloquium on Thomism and contemporary philosophy at Saint Louis University, June 12-15, 1956.

<sup>2</sup>*Metaphysics* vi. 1026a10-33.

<sup>3</sup>*In Metaphys.*, proem.

<sup>4</sup>*Ibid.*



kind of "dematerialization" of being as studied by the metaphysician. First, there is the character of metaphysics as a science in the strictest sense of the word—if, indeed, it is to merit its antique reputation of being the highest natural wisdom. For both Aristotle and St. Thomas, science deals with things which cannot be other than they are. The radical contingency of material being, which is by its very nature subject to generation and corruption, would seem to render it unfit for scientific enquiry. The hold upon reality which a material thing has is tenuous and impermanent. It is by essence capable of becoming other than it is. The very individuality of a physical substance is dark and obscure, rooted in matter, and inexpressible and unintelligible in terms of essential definition. Matter, at least in the terrestrial sphere, was thought by Aristotle to be the ultimate source of chance and luck, events which escape the ordering finality of any finite agents. Accidental being could not be the subject of any scientific enquiry, much less of one which sought to know being *qua* being. The causality of accidental being is indefinite and indeterminate, and as such it is removed from the sphere of scientific knowledge. It cannot be rendered intelligible in terms of any line of *per se*, essentially subordinated causes.

Further, the character of metaphysics as "first philosophy," as the highest natural wisdom, demands that its objects have supreme intelligibility. If it is to be by right mistress of the other sciences it must be in the highest degree intellectual, and such a science must treat, St. Thomas tells us,<sup>3</sup> of the most intelligible things. But what are these most intelligible things? To begin with, they must be first in the order of causality. Indeed, metaphysics, as *wisdom*, is precisely the knowledge of the highest causes. Secondly, a science which is maximally intellectual must treat of principles which are supremely universal. Principles of this kind are not dealt with in any one of the special sciences. Thirdly, these supremely intelligible objects are such only if they exist in complete separation from matter.

Now, those things are in the highest degree separated from matter which abstract not only from signate matter, as do natural forms taken universally, of which natural science treats, but which abstract altogether from sensible matter—and not only according to reason, as mathematical objects do, but also in respect to actual existence, as with God and the intelligences. Evidently, therefore, the science that considers these things is supremely intellectual and the chief or mistress of the others.<sup>4</sup>

Taking these three canons of maximal intelligibility for the objects of metaphysics, it is easy to see that beings considered precisely *as material* fail to measure up on all three counts. Let us consider the first canon.

Material beings as material can hardly be first and highest causes of the being of all things. Their materiality is a sign of radical contingency, of essential instability, of causal dependence upon others for their very being. Whether or not a metaphysical science dealing with first, uncaused causes—with the order of what Kant called the Unconditioned—is possible may be an open question. But if there is any metaphysical wisdom, it must be concerned with first causes of this order; and it is clear that material beings are hindered by their materiality from playing such a role. Their being by its very nature is transient, conditional, and derivative.

With respect to the second canon, of maximal universality, the manifest deficiencies and limitations of beings considered as material preclude them from qualifying as the objects of metaphysical enquiry. The particular natural sciences do indeed consider physical beings in their materiality, though not, however, in their individual but in their common material being. But this is not to study them precisely *as beings*. Until we come to the level of metaphysics, *existence* in the special natural and mathematical sciences is, as Gerard Smith points out, “an undisclosed factor which we assume without examination.”<sup>5</sup> No one of the special physical sciences is concerned with the explanation of the very existence of its entities but only with the explanation or description of their existence in qualified, limited modes of being. Gerard Smith makes this point very effectively when he shows that no account given of a physical being by mathematics and the natural sciences can be precisely a description of that thing in terms of its very being:

To explain, let  $x$  be a being. Let a being be anything which exists or can exist. Let  $x$  now be described accurately, if not fully, in measurable and sensible terms as follows:  $x$  is one (arithmetical account), spoonful (geometrical account) of gritty, acrid salt (physical account). It is not easy at first to see in what terms, other than more of the same, an account of  $x$  as a being could possibly be given. Observe, however, that to say  $x$  is a  $b\ c\ d\ e$ , and to say further that a  $b\ c\ d\ e$  is *the only possible description of  $x$  as of something which exists or can exist*, this is to say not only that  $x$  is a  $b\ c\ d\ e$ —a true statement; that is also to say that a thing which exists or can exist *must be a  $b\ c\ d\ e$* —a false statement.<sup>6</sup>

If  $x$ , for example, is one hairy ape, this is still not a description of  $x$  in terms of its common metaphysical being, as something which exists or can

<sup>5</sup>*Natural Theology* (New York: Macmillan, 1952), p. 10.

<sup>6</sup>*Ibid.*, p. 8.

<sup>7</sup>*In Boetii de Trin.*, q. 5, a. 1.

exist. If it were, *y*, who is not a hairy ape, would not be a being; and even *x*, if it should lose any of its predicates, would cease to be. Consequently metaphysical explanation is not the function of any of the special sciences of nature nor of all of them taken together. Their principles of description and explanation do not have the requisite universality.

The reasons for the third canon, that of maximal immateriality, should now be manifest. Indeed, for *any* speculative science, according to St. Thomas, a certain measure of freedom from matter in its objects is necessary. As St. Thomas writes:

On the part of the intellect it is required that the object be immaterial, because the intellect itself is also immaterial; as regards the habitus of science, the object must be necessary, because science is of necessary things, as is proved in the first book of the *Posterior Analytics*. Every necessary thing, as such, is immobile, since whatever is moved, so far as it is moved, can be and not be, either in an absolute or in a qualified sense, as is said in the ninth book of the *Metaphysics*. Consequently, separation from matter and motion, or from relationship to them, is essential to that speculable entity which is the object of speculative science.<sup>7</sup>

Hence even in the physical sciences there must be a certain dematerialization of its object, effected by abstraction from individual sensible matter, although common sensible matter must be retained. The *sheerly* contingent, with no tincture of necessity of any sort, is not only *as such* radically unintelligible but even, as St. Thomas's Third Way of proving God's existence makes clear, nonexistent, unless it is shot through and permeated with elements of formal and existential necessity which the intellect can disengage. A universe in which there is *only* the contingency arising out of the indeterminacy of matter is not even a possible universe. The superior ease, power, and facility of mathematical reasoning, as compared with the natural sciences, is rendered possible by a further purification of its objects from matter. Because of the privileged intelligibility of quantity, it can be considered by the intellect in formal abstraction apart from concretion in a material, mobile subject, although it cannot exist in this way. But the being which is the object of metaphysics must be maximally immaterial, as well as maximally universal, and first in the order of causality. Its immateriality involves a freedom from matter both in intelligibility and in existence.

## II. The Reconciliation of Maximal Immateriality and Maximal Universality

### A. The Dilemma

There is, however, in all that we have been saying about the object of metaphysics a residual ambiguity, precipitated by this very dematerialization of being which we have seen as necessary to make it a fit subject for the metaphysician. The ambiguity is reflected in the difficulty in reconciling the demand of maximal universality with the canons of maximal immateriality and primacy in causality.

In terms of maximal universality, the subject of metaphysics would seem to be *ens commune*, common being as distinguished from proper being. We have already seen that metaphysics proposes to deal with everything which is, rather than with some restricted class or category of reality. But if the subject of metaphysics is to be immaterial, immobile substances, as the other two canons would seem to prescribe, then metaphysics appears to be limited to the consideration of one class of beings to the exclusion of all others. How can we, by treating of principles *proper* to the being of immaterial substances, attain a knowledge of *ens commune*—of the being common to all things, both spiritual and physical? And, indeed, is it even possible for the human mind to achieve a *proper* knowledge of spiritual beings *qua* spiritual as distinguished from a much more modest knowledge of them by analogy with material beings?

What kind of immateriality in the object of metaphysics is really compatible with its maximal universality, so that it is the being common to all things? The text of Aristotle's *Metaphysics* is haunted by this problem. There are two series of Aristotelian texts concerning the object of metaphysics. On the one hand, Aristotle will speak of the Primary Philosophy as the science of the highest causes and as the science of the separate substances. This "theological" view of First Philosophy, as dealing with divine and immobile being, is regarded in some quarters as Platonic in origin. Being *qua* being in this context is the *ens perfectissimum*. On the other hand, there are those Aristotelian texts describing metaphysics as the science dealing *universally* with being *qua* being and not with particular being. This has often been regarded as an "ontological" view of metaphysics. Many scholars, such as Jaeger, have found these two views radically incompatible. It might even be argued that not only are the theological and ontological views incompatible but that we are confronted in them

<sup>a</sup>*The Doctrine of Being in the Aristotelian Metaphysics* (Toronto: Pontifical Institute of Mediaeval Studies, 1951).



with a choice of equally unpalatable alternatives. The theological view seems to make metaphysics utterly beyond the reach of man's earth-bound natural reason. Indeed, we do not even know, to begin with, whether immaterial substances exist or are possible. Even if such knowledge of their existence should somehow prove to be available, it does not seem to be within the competence of human reason, in its sense bondage, to know them in their essential being. On the other hand, if *ens commune* is most universal because most abstract, it seems to be the emptiest and most barren of all concepts, a veritable "night in which all cows are black." Metaphysics founded upon the analysis of such a concept appears doomed to be the most sterile of all enterprises. It would become, as the contemporary positivists and analysts have been maintaining, "sound and fury signifying nothing," a game played with pseudoconcepts devoid of any meaning or intelligibility founded upon and derived from experience and hence verifiable in it. Such is the dilemma which must be honestly confronted and overcome if any valid metaphysical knowledge is to exist at all.

## B. Proposed Solutions

### 1. THE PRIMACY OF FORM: OWENS'S ARISTOTLE

To this particular *aporia* there does not exist, I think, any finally satisfactory solution by Aristotle. Indeed, since antiquity there has been controversy about what Aristotle's definitive and ultimate position was concerning this matter. The early Greek commentators, who saw Aristotle through Neoplatonic spectacles, considered him as having opted for the theological view of metaphysics as a science of separated substances. Father Joseph Owens, C.S.S.R., in his recent magistral study of the doctrine of being in Aristotle,<sup>8</sup> takes the same stand. It is not the business of this paper to enter into controversy about this question in the history of philosophy. For our purposes it is sufficient to prescind from the historical question, which is extremely difficult and vexed, and consider merely the doctrine which Owens thinks he finds in Aristotle on its philosophical merits as an attempted solution to the dilemma which has been proposed. As a presentation of Aristotle's own final positions it is perhaps oversimplified and exaggerated. But it constitutes an ideal case study for our present purposes.

According to Owens's version of Aristotle, the being of the separated substances—of the fifty-five or forty-seven unmoved movers of Book Lambda—is the being *qua* being of all things. Sensible substances exist not by virtue of their matter (which is a principle of potentiality rather than of actual being) nor even, according to Father Owens's exegesis, in virtue of their own proper form. Instead, they are denominated *beings* by the

metaphysician solely in terms of a relationship or reference to the being which is *proper* to separated substances. This relationship in virtue of which sensible things are denominated beings by extrinsic denomination is constituted in terms of finality, not efficient causality. The Schoolmen called this kind of predication analogy of extrinsic attribution; Aristotle called it *pros hen* equivocity. As Owens puts it:

When they [sensible substances] are called Being, it is not their own nature, but the nature of the separate Entities which is primarily designated, just as the health of the body is expressed when a medicine is called healthy. Separate form is *Being* and is universal to all beings. It is the *cause* of Being, it is the Entity to all, by way of final causality. Because it is the highest type of reality it is the most universal. . . . As a science of *pros hen* equivocals, the Primary Wisdom contemplates form without matter—which is the nature of the separate Entities—in itself and as it is expressed in every other instance of Being. But this nature which it studies in every case is the same—separate Entity, which is Being *qua* Being in its highest instance. Wisdom is therefore correctly designated ‘the science of separate Entity’ without any further addition.<sup>9</sup>

Such a position achieves a reconciliation of the demands of maximal immateriality and universality only at a terrible cost. If the common being of all things is to be identified with the proper being of any of them, then all save the primary analogate will lose their own proper *being*. In their own right they will possess no metaphysical value or status. They may have proper natures of their own; but insofar as these natures are contaminated by matter and hence are principles of change and corruptibility, they are *in themselves* simply nonbeing. I do not believe Aristotle himself intended such a conclusion—it would certainly be only a variety of Platonism—but it is arguable that any attempt to establish metaphysics on the primacy of form will tend in this direction.

There are also other difficulties. It is remarkable that we find nowhere in the extant writings of Aristotle any treatise upon metaphysics which actually attempts to develop a science which in treating spiritual substance treats all beings universally. As Owens points out,<sup>10</sup> not even Book Lambda attempts to show how separate substance is expressed in every predication of being, although it contains the basis of such treatment in the doctrine of the final causality of the unmoved movers. We are forced, therefore, to say that Aristotle never wrote a metaphysics, at least in the sense of a science which has for its subject divine being. And, indeed, in terms of Aristotle’s

<sup>9</sup>*Ibid.*, pp. 295-96.

<sup>10</sup>*Ibid.*, p. 287.

<sup>11</sup>*Metaphysics* ii. 1. 993b9-11.

<sup>12</sup>*In de Trin.* q. 5, a. 4.

<sup>13</sup>*Ibid.*

own epistemology and psychology there are compelling reasons making any such enterprise impossible. Aristotle himself once wrote,<sup>11</sup> perhaps with Plato's allegory of the cave in the background of his mind, that divine things, though supremely intelligible in themselves, are in relation to our human intellect as the light of the sun to the eyes of the owl. We cannot, therefore, attain to them by the light of natural reason except as we are led to them through their effects; and this is only a remote, indirect knowledge of them by analogy with material, sensible things. There is for the human mind in this life no direct intellectual intuition of subsistent forms.

## 2. *Ens Commune* AND THE PRIMACY OF EXISTENCE: ST. THOMAS AQUINAS

The kind of *separation* from matter and motion which constitutes the being *qua* being which is the object of metaphysics is not that of disengaging subsistent forms from matter. The primary task in founding a science of metaphysics is not, therefore, to first establish the existence of wholly immaterial substances and then, by somehow knowing the *proper* natures of these beings, to know the "common," metaphysical being of all things. This is to lead the human mind into a blind alley in which no forward movement is possible. The *aporia* growing out of the apparent conflict between the canons of maximal immateriality and universality cannot be resolved in this way.

As a consequence, St. Thomas Aquinas carefully distinguishes between divine being and *ens commune*, and denies that the positively immaterial being of God and of spiritual substances can be the subject of metaphysical enquiry. It is rather the being *common* to all and proper to none which is the real object of metaphysics. Such a science will indeed lead toward, and be consummated in, the knowledge of the existence of God and other spiritual beings and of their attributes through negation and analogy with material things; but such knowledge is the *goal*, not the *starting point*, of metaphysics. In metaphysics divine things are not considered in their own proper natures according as they subsist in themselves, which is the subject of sacred theology dependent upon revelation, but only insofar as they are principles of all things. Hence St. Thomas says that spiritual beings "are studied in that doctrine wherein the principles *common* to all beings are established and whose subject is being *qua* being."<sup>12</sup> All beings, "as regards their common participation in being, have certain principles that are the principles of all beings."<sup>13</sup> Such principles, common to all beings, are called common in two ways. There are principles analogically common to all beings *by predication*. Divine things are not principles of *ens commune* in this way, although the Owensian version of Aristotle attempted to make them so. Divine things are common principles of all be-

ings not by way of predication but by way of *causality*, which is the only way in which things numerically the same—individuals—can be common principles.

The *aporia* of universality and immateriality has, therefore, its origin in a double ambiguity. Both “universality” and “immateriality” are ambiguous, and in order to untie the *aporia* we must distinguish two different meanings for each term. As we have seen, universality may be either in the mode of predication or of causality. “Being separated from matter and motion” also has two distinct modes, and we will fail to understand the immateriality of the object of metaphysics unless these two meanings are precisely distinguished. The two modes of immateriality serve for St. Thomas in distinguishing metaphysics and sacred theology. Both sciences, he tells us,

are concerned with things existing apart from matter and motion, but in diverse ways, according as a thing can exist in separation from matter and motion in either of two ways: in *one* way if by reason of its very nature it can in no wise exist in union with matter and motion, and thus are God and the angels said to be “separated” from matter and motion; in *another way* if the thing is not by its very nature existent in matter and motion but can exist apart therefrom, though it may sometimes be found in matter and motion; and thus being and substance, potency and act, are “separated” from matter and motion, because they do not depend upon matter and motion for their existence . . .<sup>14</sup>

The second mode of immateriality characterizes the common being of all things which is the object of metaphysics; the first mode is the being of divine things, not as manifested through their effects, but as manifested by God Himself in revelation. It is this latter which is the subject of sacred theology.

The metaphysical notion of being, therefore, is analogously common to all beings, in all of whom existence is found properly proportioned to, and as the actuality of, their natures, whether they be material *or* (if indeed spiritual entities exist) immaterial. It is a notion which is not reached by abstraction of any quiddity or nature, and which is not knowable, therefore, by any simple apprehension of essence. Indeed, there *is* no quiddity or essence which is common to all beings—no *formal* perfection which is the being *qua* being of everything which is.

But how, then, has such a notion been reached, if not by some kind of abstraction or prescinding from all of the proper differences, formal

<sup>14</sup>*Ibid.*

<sup>15</sup>ST, I, q. 3, a. 4.

<sup>16</sup>*Ibid.*



and material, found in beings? Surely, if we prescind from every specifying or individuating difference in beings we will end up with a pseudonotion of common being which will be utterly empty of content and meaning. We are confronted with the other horn of the dilemma mentioned earlier, in which the notion of being is indistinguishable from nothingness, and the metaphysics which pretends to analyze such a barren concept is an illusion. If we try to isolate or separate common being from proper beings, do we really grasp an intelligibility founded in experience which can be in us the seed of the highest natural wisdom?

Certainly there are texts in St. Thomas in which it is hard to see the vital difference between the separation from matter which gives the special immateriality and universality of *ens commune* and the abstraction from matter and specific differences which yields a generic concept. It is true that a generic universal can only signify, in an indeterminate way, *material* things. Starting with material beings, a process of total abstraction can never transcend the material or attain at the uttermost limits of generalization any notion strictly predicable of a spiritual being. For this reason the being which is divisible into the ten categories or predicaments, even though it is transgeneric, is still insufficient to qualify for metaphysical being. Nor can formal abstraction, characteristic of mathematics, ever reach a plane of spiritual *existence*. Mathematical formalities can be conceived and defined in abstraction from matter but not conceived as *existing* in this way. But what process other than abstraction can really attain the high plateau of metaphysical being?

In order to sharpen the problem, let us examine a crucial text of St. Thomas from the first part of the *Summa Theologiæ*.<sup>15</sup> In it St. Thomas is distinguishing between *ens commune* and the being proper to God alone. Neither divine being nor the being-in-general which is predicated of everything can have any additions made to them. They cannot be further specified or differentiated (and hence limited or restricted) without ceasing to be either divine being or being-in-general. St. Thomas points out that a thing that has nothing added to it can be understood in two ways. Its essence may *preclude* any addition. This is the case of divine being, which is the infinite actuality of existence itself, precluding any kind of limitation or contraction to any finite mode of existing. On the other hand, St. Thomas writes,

we may understand a thing to have nothing added to it inasmuch as its essence does not *require* that anything should be added to it (thus the genus animal is without reason, because it is not of the essence of animal in general to have reason, but neither is it of the essence of animal to lack reason).<sup>16</sup>

*Ens commune*, being-in-general, then neither explicitly *includes* in its connotation the proper being of anything—that which differentiates it from all others—nor does it *exclude* it. The difficulty, however, is that this is also true of any generic universal in relation to its inferiors, and St. Thomas's own example only aggravates the problem. Certainly the notion of metaphysical being cannot so prescind from its differences as to exclude them. There is, in any event, nothing univocally and generically common to all beings, and the differences between beings are themselves *beings*. But these specifically and materially different modes of being cannot be actually included in *ens commune* in an explicit way without transforming common being into proper being.

The Schoolmen in the Thomistic tradition have dealt with this problem by talking about an "abstraction of confusion"—surely an unfortunate phrase in the use of the terms "abstraction" and "confusion." Somehow implicitly and actually but not explicitly the metaphysical notion of being must contain the proper modes of existing of all things without being restricted to any of them. But how can the human intellect form such a notion?

For St. Thomas, as we have already remarked, this simply cannot be explained by any process of abstraction which terminates in the simple intellectual grasp of some quiddity or essence, which will always be a nature proper to some being but not common to all. It cannot be the abstraction or separation of any *form*. Rather, what is separated and known as analogically common to all beings is precisely the act of existence itself. The intellect knows existence not in quidditative apprehension but in the judgment, presupposing a united operation of intelligence and sense powers. The existence which is known in this way is of course the existence of sensible, material beings. The judgment which definitively constitutes the metaphysical notion of being has come, in the Thomistic tradition, to be called the "negative judgment of separation"—that *to be* is not the same as *to be material*. Precisely what is the meaning of this judgment which founds the object of metaphysics, and what makes it possible?

The separation which is effected in the negative judgment is founded upon the discovery, in our experience of the existence of sensible beings, that *existence* is an act which is not *in and of itself* limited or restricted to finite modes of existing. Existence is the actuality even of forms. To contract this act of existing to a particular mode—to limit it so that it becomes the existence *proper* to a particular nature or kind of being—is to *add* to it, to formally or materially determine it so that it ceases to be *ens commune*. The metaphysical notion of being is not, therefore, the result of the abstraction of form from matter; but rather it is achieved by the separation of existence, as the act of acts, the perfection of perfections, from all material

and formal limitations and restrictions. This is the being analogically common to all things. In each of them it will be proportioned to the nature which receives it and is actuated by it. In one of them—God—existence may even be the *proper* nature. Whether there is such a being whose essential nature is to exist is a question not prejudged or known in advance prior to the constitution of the object of metaphysics. Nor is it a question which can be answered simply by an analysis of the content of *ens commune*. Suffice it to say that the existence of such a being is not *precluded* in such a notion, any more than the proper existence of material beings is precluded. Instead of being the emptiest and most abstract of all notions, it is the richest, for everything which *is*—either material or immaterial—is implicitly included in its content, and nothing real is excluded from its extension.

The source and the fullness of metaphysical intelligibility, therefore, according to St. Thomas Aquinas, is in existence rather than in form.

### III. How Not to Establish the Object of Metaphysics

The main lines of St. Thomas's doctrine on the nature of the object of metaphysics and the meaning of the negative judgment of separation which is its foundation have now been described. But a fuller explanation of how this judgment—that *to be* is not the same as *to be material*—is grounded in experience and knowledge is needed. Let us first examine briefly certain approaches which I think are fruitless and excluded by the principles of St. Thomas's philosophy, although perhaps most professed Thomists since the thirteenth century have tried to employ them.

#### A. The Approach to Metaphysics from the Philosophy of Nature

The most common attempt to validate the negative judgment of separation has been to seek arguments within physics, or the philosophy of nature. The underlying assumption of all such theories is that while the philosophy of nature is immediately grounded in the data of experience, metaphysics is not and can only be indirectly related to experience through the intermediary of physical knowledge. Experience has, according to this view, only physical intelligibility. The philosophy of nature is therefore a bridge leading to the starting point of metaphysics. Obviously such a theory, in supposing that a lower science can establish the formal object of a higher science, is expecting the philosophy of nature to transcend itself and the limitations of its own formality. This is, I think, to expect the impossible.

It has most often been supposed that the philosophy of nature shows that *to be* is not the same as *to be material* by demonstrating, in a properly



physical way, the existence of God or of some other immaterial, spiritual being. Appeal is often made to the arguments for the existence of a First Unmoved Mover in the eighth book of Aristotle's *Physics* and in St. Thomas's First Way. There is not time here to examine the validity and character of proposed physical demonstrations of the existence of spiritual beings. But I think that, as the Reverend George Klubertanz, S.J., has recently been pointing out, there is one rock upon which all physical arguments seeking to prove the existence of immaterial causes and principles must founder. As long as the philosophy of nature remains within its own formality of *mobile* being, the meaning of existence, of the *is* in any of its propositions, must necessarily and inseparably be limited to changeable, material existence. Without a *prior* negative judgment of separation one cannot even begin to undertake a demonstration of the existence of God or spiritual beings. Immanuel Kant was quite right in supposing that it is an illusion to seek to go from the Conditioned objects of experience to that which is absolutely Unconditioned, *if* the only way in which reason can move or know existence is in terms of the Forms of sensibility and the categories of understanding. Such Kantian Forms and categories constitute an apparatus designed only for the production of *physical* intelligibility. Physical categories of explanation, whether Kantian or otherwise, are quite futile for either the production or the discovery of *metaphysical* intelligibility. If experience should prove to have *only* physical intelligibility, then metaphysics is indeed an illusion and an idle dream.

There is a stronger argument which is often advanced by those who think the foundations of metaphysics can be established in physics. Aristotelian and Thomistic philosophy of nature, through the analysis of substantial change, can indeed show that matter, in its primary and ultimate nature, is pure potentiality. As a potential and indeterminate principle, it cannot simultaneously be the intrinsic principle within a being which makes it *actually to exist*. This, I am convinced, is a valid insight, and without it substantial change is radically unintelligible and impossible. It surely constitutes a significant part of the evidence which enables us to see that *to be*—the act of existing—is not identical with *to be material*, even in a material being. But is it *sufficient* to ground this judgment?

I think it is not, because there still would remain the possibility of being, as *ens commune*, being identified with the *proper form* of some being, which would make radically impossible the real existence of *many diverse* beings. Even if formally diverse beings were asserted to exist, but to exist precisely in virtue of a form proper to each, this formal diversity would still remain metaphysically unintelligible. Nor would a satisfactory solution be possible by asserting that these formally diverse beings *existed* not in



virtue of their own proper form but only by virtue of some relation to being *qua* being identified with the proper form or essential nature of some other (Aristotle's *pros hen* equivocacy, the Schoolmen's analogy of extrinsic attribution). This form proper to another could not be the *common being* of all. As we have seen, even divine being is not *ens commune*. If it were, leaving aside the obvious alternative of pantheism, then we would have to say that the many who are denominated beings by extrinsic denomination—only by reference to the being of another—would have no real being of their own.

Consequently, to fully ground the negative judgment of separation, without which metaphysics cannot even begin, primary and compelling evidence must be found in our experience of the existence of sensible things, and in our judgments founded upon that experience, for a real distinction of essence and existence. Existence must be shown to be the act of forms themselves. The very possibility of the real existence of many formally diverse or numerically distinct beings rests upon the separation of existence from both matter and form. The metaphysical notion of being involves a real distinction of act and potency for finite beings on the level of existence itself. The philosophy of nature is incapable of knowing act and potency save in terms of matter and form and substance and accident—which is to attain principles of act and potency not in terms of being *qua* being but solely in terms of being *qua* mobile.

#### **B. Is Metaphysics Self-caused? Can Metaphysics Establish Its Own Object?**

The radical inadequacy of physics to engender the starting point of metaphysical knowledge has led certain Thomists to suppose that metaphysics is somehow self-engendering, so that it produces its own object by formally metaphysical processes. This would be to suppose that a science already formally constituted causes itself to be formally constituted—in other words, pre-exists its own existence.

One variety of such a position follows the old line we have so frequently encountered, which seeks to constitute the immaterial object of metaphysics by demonstrating the existence of God or of some spiritual being, this time metaphysically rather than physically. An approach of this kind has failed to distinguish the two modes of immateriality which were described earlier. In any event, a vicious circle is inevitable, since any such arguments to the existence of spiritual being already presuppose, if the arguments are properly metaphysical, that the object of metaphysics has already been formally constituted by a valid negative judgment of separation. I think it is easy enough to show that St. Thomas's famous Five Ways take for granted a real distinction of essence and existence in the sensible, material beings

from which the proofs begin. Without the negative judgment of separation, such a real distinction could not even be formulated. To maintain, as a contemporary Thomist seems to be saying, that this distinction itself, at least insofar as it involves the recognition of existential potency in creatures, is the *consequence* of first proving God's existence as a being in whom existence is His proper nature, is to make it radically impossible ever to prove God's existence at all. There is no way of metaphysically demonstrating the existence of spiritual entities unless metaphysics is already formally constituted by its object.

Indeed, the properly metaphysical meaning of the principle of causality itself presupposes the separation of existence brought about in the negative judgment. One must first know that existence is not *in and of itself* the existence of any particular nature or proper mode of being before a real distinction of essence and existence in finite beings can be crystallized and explicitly known, and as a consequence a metaphysical principle of causality formulated. Existence as metaphysically separated in the negative judgment is not even, as such, the existence proper to God. If it were, the existence of creatures would be impossible. Nor does existence as metaphysically separated exclude the existence of a being whose proper nature is *to be*. But we can be led by way of causality to the knowledge of God's existence from the existence of sensible, material beings only if we know that where existence is received in specific natures which contract and limit it, such existence is related to essence as act to potency and is therefore contingent, participated, and caused.

#### IV. Metaphysics and Experience: Conclusion

Is there any legitimate escape from the vicious circle involved in attempting to prove that *to be* is not the same as *to be material* by processes which already presuppose what is to be proved? Those who attempt to find the starting point of metaphysics in physics are trying to base it upon evidence lacking the intelligibility proportioned to it and are illicitly assuming the negative judgment of separation in trying to prove it. The same illicit assumption is involved in trying to make metaphysics project itself into being by metaphysically proving its own starting point. This kind of bootlegging is against the laws of human knowing and should be stopped. If there is to be any valid starting point at all for the journey into metaphysical wisdom, it can only be in our integral experience, perceptual and intellectual, of the world of sensible, material beings and of such massive facts as their existence in modes of formal diversity and numerical distinction. Such experience is charged not only with physical intelligibility, but there

is real metaphysical necessity and intelligibility discernible in it. It is structured not only physically but metaphysically as well. There is no other possible source for metaphysical knowledge.

The general tendency of modern philosophy has been to deny that experience possesses this highest dimension of significance and meaning. Certainly if metaphysics is cut off from any direct empirical foundations, it becomes a sterile rationalism, an a-priori analysis of pseudoconcepts. The rationalistic systems of the late mediaeval Schoolmen and of the seventeenth century are examples. If there is to be any real rehabilitation of metaphysics, there must first of all be a re-examination of the data of experience, more searching, more profound, and above all more *empirical* than that which was made by the empiricists of modern philosophy. This is the kind of preliminary phenomenological investigation which the Reverend Robert Henle, S.J., has recently called for. It is here that we should all begin; and it is only here, if at all, that metaphysical wisdom can have its birth in the human mind.

## Chronicle

AT THE ANNUAL MEETING of the Metaphysical Society of America at Indiana University, Bloomington, Indiana, March 22 and 23, the following officers were elected for 1957-1958: President, William Ernest Hocking; Secretary, Sidney C. Rome; Treasurer, Richard L. Barber; Councillor, Paul Weiss.

MARQUETTE UNIVERSITY announces a "Philosophical Workshop in the teaching of philosophy," to be held June 10, 11, 12, and 13. The general theme is the philosophical knowledge of man; the discussions will be led by the Reverend Gerald B. Phelan, Doctor Donald A. Gallagher, the Reverend Joseph Owens, C.S.S.R., and the Reverend Bernard J. Cooke, S.J.

*Victorian Studies*, a new quarterly journal devoted to the examination of Victorian culture, will be published at Indiana University under the editorship of Philip Appleman, William Madden, and Michael Wolff. The Editors hope to include articles related to the various academic fields, as well as book reviews, bibliographies, and discussions. The subscription price will be \$5.00; the first issue is to appear in the fall of 1957. (Address: The Editors, *Victorian Studies*, Indiana University, Bloomington.)

PROFESSOR ROLAND HOUDE, Villanova University (Villanova, Pa.) is compiling a bibliography of bibliographies of philosophers. Anyone who knows of a rare or little-known bibliography is asked to send as detailed information as possible to Professor Houde.



## A Note on Certain Textual Evidence in Fabro's *La Nozione Metafisica di Partecipazione*

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In a previous paper I referred to the rather recent interest in the problem of Thomism and Platonism, and pointed to the elaborate studies of Santeler,<sup>1</sup> Fabro,<sup>2</sup> Geiger,<sup>3</sup> and Little.<sup>4</sup> I repeat here, by way of introduction, some of the remarks made there:

These studies, obviously the result of most painstaking research, present a number of broad generalizations concerning Saint Thomas' historical and doctrinal relationships to Platonism. Their conclusions are supported by an extensive array of textual evidence. The value of the generalizations, therefore, depends entirely upon the texts presented. The crucial and critical question, then, in estimating the correctness of these studies and their enduring contribution to Thomistic scholarship is this: Do the texts, when properly and accurately read, support the interpretations essential to the various theses of these authors?

Now, anyone acquainted with modern Thomistic scholarship knows that it is no easy or simple matter to read a given text correctly. The intricacy of the sources and historical backgrounds, the difficulties of terminology, of methods, of chronology and so forth, make the accurate reading of a text, as well as its ultimate interpretation into a general scheme, an achievement requiring all the resources of scholarship. Laborious and slow as it is, we must yet apply this type of study to the accumulated texts of these authors before we can properly assess the value of their work.<sup>5</sup>

In the rest of the paper I summarized and presented the results of studies in St. Thomas's own methodology for the handling of *positiones*.

In this present paper it is my purpose to submit to close scrutiny certain texts advanced by Fabro in support of his own conclusions. I do not wish at the present time to evaluate or criticize the broad generalizations of Fabro's study. My present purpose is much more modest. I propose to clear the ground by examining only that textual evidence which he advances in pages 57 to 64.

In these pages Fabro argues that the development of St. Thomas's thought displays an increasing benevolence toward Plato and a gradual but successful effort finally to create a synthesis by incorporating the Platonic metaphysics of participation into his own system. In support of this con-

clusion Fabro quotes a series of texts which we may take to constitute his fundamental evidence, for at the close of the series he says:

It therefore appears established that, especially with regard to the works of his mature period, St. Thomas always tended toward a closer assimilation, within Aristotelian thought, of the metaphysical content of the Platonic notion of participation.<sup>6</sup>

And early in these pages he speaks of a "more favorable attitude toward Platonism"<sup>7</sup> and a more explicitly "benevolent attitude"<sup>8</sup> in the later works.

Obviously a general discussion of Aristotelian thought and the metaphysical content of the Platonic notion of participation would require the prior establishment of an accurate historico-philosophical definition of Platonism and Aristotelianism. Fortunately, the present discussion does not demand so difficult and laborious an undertaking. For Fabro, by using only St. Thomas's explicit comments on Plato and Aristotle, has located the immediate problem within the thought of St. Thomas himself. What Platonism and Aristotelianism are and what they mean are here taken to be that which St. Thomas understood them to be and to mean.

It seems obvious, also, that there is no question here of a total point-by-point opposition between Aristotle and Plato such that if one were to construct a complete list of Aristotelian theses, a list, corresponding in thesis-by-thesis opposition, could be constructed for Platonism. Whether one takes a careful historical view or whether one looks at the divergence of Aristotle and Plato through the minds of subsequent philosophers and commentators, it is surely clear that on many points Aristotle and Plato are in at least some agreement. The real problem is to determine (and here I replace the problem within the thought of St. Thomas) where St. Thomas thought the opposi-

<sup>1</sup>*Der Platonismus in der Erkenntnislehre des heiligen Thomas von Aquin* (Innsbruck: Rauch, 1939).

<sup>2</sup>*La Nozione Metafisica di Partecipazione secondo S. Tommaso d'Aquino* (Milan: "Vita e Pensiero," 1939).

<sup>3</sup>*La participation dans la philosophie de S. Thomas d'Aquin* (Paris: Vrin, 1942).

<sup>4</sup>*The Platonic Heritage of Thomism* (Dublin: Golden Eagle Books, 1950).

<sup>5</sup>"Saint Thomas' Methodology in the Treatment of 'Positiones,'" *Gregorianum*, xxxvi (1955), 391-409.

<sup>6</sup>"*Pare adunque assodato che soprattutto nelle opere della maturità S. Tommaso tendesse ad una assimilazione sempre più intima entro il pensiero aristotelico del contenuto metafisica della nozione platonica di partecipazione*" (*La Nozione*, p. 64).

<sup>7</sup>*Ibid.*, p. 58.

<sup>8</sup>*Ibid.*, p. 59.

<sup>9</sup>"Il problema che il Gilson ha fra le mani riguarda l'ilemorfismo universale di Avicenna nell'influsso che ebbe sull' Augustinismo, da una parte, e nella sua derivazione da Platone, dall'altra; ora pare che è più prudente trattare i problemi uno alla volta prima di avanzare affermazioni d'ordine generale" [italics added] (*ibid.*, pp. 63-64).

<sup>10</sup>*In II Sent.*, d. 1, a. 1, *Exp. Text.*; Fabro, *ibid.*, p. 58.

<sup>11</sup>"Veramente a voler essere precisi, e qui tocchiamo il punto cruciale del nostro saggio, anche S.T. sembra sia arrivato per tappe ed un po' alla volta a questa interpretazione 'sintetica' del due sistemi, ed agli inizi della sua attività letteraria tutte le sue simpatie erano per il Filosofo" [italics added] (*La Nozione*, p. 58).

tion lay and how important he estimated it. If the question is placed in this fashion, it is immediately clear that we cannot simply lump texts together under the two rubrics of "approval" and "disapproval" of Plato. To strike a balance between such undifferentiated lists and so arrive at a *generalized* attitude of St. Thomas in regard to Plato and Platonism would thus confuse the entire issue. Fabro himself adopts this view in criticizing Gilson. After quoting Gilson's generalized conclusions, he remarks:

The problem with which Gilson is faced concerns the universal hylomorphism of Avicenna in its influence on Augustinianism, on the one hand, and in its derivation from Plato on the other. *Now it seems that it is perhaps more prudent to treat problems one at a time before advancing affirmations of a general type.*<sup>9</sup>

Since, then, this procedure seems imposed by the nature of the question as well as stipulated by Fabro himself, I shall deal with the texts as they present different individual problems. However, it must be remembered that the texts are woven together in Fabro's presentation in such a way as to produce a cumulative general effect.

The investigation of these texts may also be considered as a series of case studies in Thomistic textual exegesis and as a contribution toward a general methodology for the reading of St. Thomas.

Fabro presents the development of St. Thomas's views in essentially three stages. First he establishes a point of departure in the *Commentary on the Sentences* wherein he finds St. Thomas an unqualified partisan of Aristotle and Plato's determined opponent. He then presents a series of texts from later works which are intended to show St. Thomas's increasing benevolence toward Plato and his gradual incorporation of Platonic metaphysics into his own system. Finally, he finds the climax of these developments in the third chapter of the *De Substantiis Separatis*.

### I. The First Stage: *In II Sent.*, d. 1, *Expositio Textus*

Fabro advances one text to establish the point of departure:

Plato erravit, quia posuit formas exemplares per se subsistentes extra intellectum divinum, nec ipsas neque materiam a Deo esse habere.<sup>10</sup>

From this text he generalizes on the early attitude of St. Thomas:

Truly, to be precise, and here we touch upon a crucial point of our essay, even St. Thomas seems to have arrived gradually and a little at a time at this "synthetic" interpretation of the two systems. *At the beginning of his literary activity he was wholly sympathetic toward the Philosopher.*<sup>11</sup>

But is one text alone sufficient to ground a generalization with regard to St. Thomas's attitude "at the beginning of his literary activity," and does this text represent the consistent attitude of St. Thomas at that period?

There are approximately forty texts in the *Commentary on the Sentences* which refer to Plato and/or the *Platonici*.<sup>12</sup>

Now, while these texts are similar in being all Platonic references, they differ widely in the doctrinal points discussed and in the use St. Thomas makes of them. Moreover, if we consider them in relation to the Platonic references found in later works of St. Thomas, we find that they fall naturally into continuity with various series of texts which often reappear in the same sort of doctrinal context in the various works and often maintain a continuity quite in isolation from the general discussions of Platonism.

Let us first examine some of these texts for what they may reveal of St. Thomas's *general* attitude toward Platonism.

One group of texts deals with Plato's definition of pleasure. The definition itself is rejected precisely on Aristotelian grounds,<sup>13</sup> but in several of the texts the definition is recognized as revealing some aspect of the nature of pleasure and is used as a confirmation of a point of doctrine.<sup>14</sup>

Again a sympathetic interpretation of Plato's "*intellectus paternus*" is offered.<sup>15</sup>

Two texts deal with Plato's theory of the "self-moved first mover." St.

<sup>12</sup>I say "approximately" because the determination of what constitutes a unit-text is necessarily somewhat arbitrary. See Henle, *Saint Thomas and Platonism* (The Hague: Nijhoff, 1956), pp. 7-17.

<sup>13</sup>"... definitio illa Platonis non est conveniens, ut patet per Philosophum in vii et x Ethic" (*In IV Sent.*, d. 49, q. 3, a. 4, qa. 4 ad 2, in contr.).

<sup>14</sup>"... Delectatio autem non potest esse nisi in cognoscente: propter quod Plato dixit, quod delectatio est generatio sensibilis in naturam" (*In I Sent.*, d. 1, q. 4, a. 1). Cf. *In II Sent.*, d. 20, q. 1, a. 2 ad 3; *In III Sent.*, d. 27, q. 1, a. 2 ad 3.

<sup>15</sup>"Vel forte intellectum paternum nominat intellectum divinum, secundum quod in se quodam modo concipit ideam mundi..." (*In I Sent.*, d. 3, q. 1, a. 4 ad 1).

<sup>16</sup>"Ad secundum dicendum, quod Augustinus accipit large moveri, secundum quod ipsum intelligere est moveri quoddam et velle, quae proprie non sunt motus, sed

comparatione. In hoc enim verificatur dictum Platonis qui dicit: 'Deus movet se' . . ." (*ibid.*, d. 8, q. 3, a. 1 ad 2). "Sed forte propter hoc Plato posuit quod primum movens seipsum movet, inquantum cognoscit se et amat se, ut in viii Phys. dicit Commentator" (*ibid.*, d. 45, q. 1, a. 1 ad 3).

<sup>17</sup>"Così nelle Sentenze, il Magister, trattando della creazione, simpatizza per Platone contro Aristotele ed in ciò si comporta da buon teologo e da fedele interprete della tradizione patristica" (*La Nozione*, p. 58).

<sup>18</sup>*Liber Secundus Sententiarum*, 1.

<sup>19</sup>*Ibid.*

<sup>20</sup>"... ma S. Tommaso, nel Commentario, rettifica subito secco. . ." (*La Nozione*, p. 58).

<sup>21</sup>*In II Sent.*, d. 1, q. 1 *Exp. Text.*

<sup>22</sup>"... e difende [sc. S. Tommaso] con calore l'ortodossia di Aristotele" (*La Nozione*, p. 58).



Thomas refers explicitly to Averroes's commentary on that section of the *Physics* in which Aristotle attacks this Platonic position. However, St. Thomas justifies Plato by giving a broader interpretation of the word *movere*.<sup>16</sup>

These are only illustrations but they are sufficient to show that St. Thomas's attitude "at the beginning of his literary activity" was far more nuanced than Fabro's use of a single text would indicate. His attitude already included a discriminating approach to Platonic doctrines and an independence in evaluating Aristotle's critique.

Fabro increases the apparent evidential value of this text by his exposition of its setting in the *Commentary*. He introduces it thus:

Thus in the *Sentences*, the Master, treating of creation, sympathizes with Plato against Aristotle and in this way remains a good theologian and a faithful interpreter of the Patristic tradition.<sup>17</sup>

But actually, in the part of the *Sentences* in which the Master treats of creation and on which the *Expositio Textus* cited immediately depends, there is no indication of sympathy with Plato. On the contrary, Peter Lombard wrote:

. . . Moyses . . . elidens errorem quorundam plura sine principio fuisse principia opinantium. Plato namque tria initia fuisse existimavit Deum scilicet, et exemplar et materiam et ipsa increata sine principio, et Deum quasi artificem, non creatorem.<sup>18</sup>

There is no effort whatever in Peter Lombard's text to mitigate Plato's error; in fact, he proceeds immediately to refute it from Sacred Scripture.<sup>19</sup>

Fabro now continues:

. . . but Saint Thomas, in the *Commentary*, rectifies things quickly and dryly.<sup>20</sup>

Since Peter Lombard has not excused Plato, there is nothing for St. Thomas to "rectify"; and the addition of "subito secco" is quite gratuitous, for if we now compare the alleged rectification with the words of Peter Lombard, St. Thomas, if anything, is less sweeping than the Lombard:

Plato erravit quia posuit formas exemplares per se subsistentes extra intellectum divinum, neque ipsas neque materiam a Deo esse habere.<sup>21</sup>

In other words, St. Thomas, as we might expect in a passage taken from the *Expositio Textus*, simply repeats the exposition he found in the *littera* of Peter Lombard. There is some variation in the statement but certainly no "rectification."

Fabro now adds:

. . . and he [St. Thomas] enthusiastically defends the orthodoxy of Aristotle.<sup>22</sup>

No reference is given for this addition. Certainly there is no defense in the *Expositio Textus* itself. In the articles of the *Commentary* directly based on this part of the *Expositio*, Aristotle's opinion is twice discussed explicitly. In listing opinions on *secondary* causality, Aristotle's is cited with approval and he seems to be said to hold that matter is created by God.<sup>23</sup> This is a simple statement, but certainly without "calore." Aristotle's doctrine is listed among the errors in the article "Utrum Mundus Sit Aeternus" and all these doctrines including Aristotle's are said to be "falsae et hereticae."<sup>24</sup> This is certainly no complete defense, no direct defense, and no enthusiastic ("con calore") defense.

Thus the gratuitous annotations with which Fabro surrounds this simple text from an *Expositio Textus* gives it an interpretative coloring, completely unjustified by, and partially directly contrary to, the context.

In fine, when this first text is read in its proper immediate context as well as against the entire body of Platonic references in the *Commentary on the Sentences*, it simply does not support Fabro's generalization. St. Thomas, in commenting on the *Sentences*, displayed a judiciously discriminating attitude with regard to Plato's doctrines. He is not the unqualified partisan of Aristotle or the unqualified opponent of Plato.

## II. The Second Stage

In order to treat the texts here presented without undue repetition, I shall divide them into interrelated groups. One text, however, stands somewhat alone and so must be considered separately. I shall begin with this text.

### A In IV *Metaphys.*, lect. 4

Fabro presents the text thus:

Finally one meets also this curious text in the *Commentary on the Metaphysics* (a. 1271-1272): "Sive dicamus quod universale sit unum in omnibus secundum *opinionem* nostram, sive quod sit aliquid separatum secundum *opinionem* Platonis, sicut *fortassis* non est verum . . ."<sup>25</sup>

The text is read as displaying a benevolent attitude toward Plato, for Fabro begins his next sentence, "Quest'atteggiamento benevolo"; presumably the date of the *Commentary* is explicitly mentioned to emphasize, in line with the general tenor of Fabro's argument, the maturity of the text. Fabro's

<sup>23</sup>*In II Sent.*, d. 1, q. 1, a. 4 ad 4.

<sup>24</sup>*Ibid.*, d. 5, *sol.*

<sup>25</sup>*La Nozione*, p. 59.

<sup>26</sup>The translation is taken from the text given in the Cathala edition of St. Thomas's *Commentary*, Book IV, Lectio 4.

<sup>27</sup>*In IV Metaphys.*, lect. 4 (ed. Cathala, 584).

<sup>28</sup>*In I De An.*, lect. 10 (ed. Pirotta, 150).

<sup>29</sup>*In III Phys.*, lect. 8 (ed. Leonine, vol. II, No. 5). Cf. also *In VII Metaphys.*, lect. 16 (ed. Cathala, 1646); *In V Phys.*, lect. 6 (ed. Leon., II, 8). Fabro adds, in a footnote (p. 59, n. 1), a reference to *In VII Metaphys.*, lect. 5 (ed. Cathala, 1368-70), apparently as a confirmation. This text, however, is simply another Aristotelian *foran* text.

underlining of *opinionem* and *fortassis* places the weight of the text in these words.

In order to read this text aright, it must first be related to the Aristotelian *littera* on which, as a commentary, it depends. As soon as we do so, we find that the text is an *ad litteram* comment, simply a clarifying expansion of Aristotle and that the words which seem to make this a "curioso testo" for Fabro are, as a matter of fact, *in the text of Aristotle*: "Et propter hoc si ens et unum non est universale idem in omnibus aut separabile, *ut forsitan non est.*"<sup>26</sup> This is simply repeated by St. Thomas as "sicut fortassis non est verum." If this phrase displays a "benevolent attitude," it is Aristotle's benevolence which the text reveals. A curious situation indeed, since there is no doubt, either in St. Thomas's mind or in anyone else's, of Aristotle's opposition to the separation of the universals. Now, the apparently surprising character of this remark did not escape St. Thomas himself, for, after laying out the amplified meaning of the *littera*, he explains:

Utitur tamen adverbio dubitandi, quasi nunc supponens quae inferius probabuntur.<sup>27</sup>

Thus the expression of doubt is seen by St. Thomas not as reflecting any real doubt in the mind of Aristotle but as a methodological procedure. Nor is this simply an *ad hoc* justification of the "curious" *fortassis*. On the contrary, it is a general principle of interpretation which St. Thomas frequently uses and which involves an explicit recognition of Aristotle's method. Thus, to quote but two parallel examples:

Et quia ipse determinabit inferius quod intelligere est quaedam operatio animae, in qua non communicat cum corpore, et non est conjuncti; ideo dicit, quod intelligere forsitan est aliquid alterum ab operationibus conjuncti. *Et dicit "forsitan," quia non loquitur definiendo, sed supponendo.*<sup>28</sup>

Deinde cum dicit: Physice autem magis etc., inducit rationes naturales ad ostendendum quod non sit corpus infinitum in actu. Circa quas considerandum est quod, quia Aristoteles nondum probaverat corpus caeleste esse alterius essentiae a quatuor elementis, opinio autem communis suo tempore fuerat quod esset de natura quatuor elementorum, procedit in his rationibus ac si non esset aliud corpus sensibile extra quatuor elementa, secundum suam consuetudinem: *quia semper antequam probet id quod est suae opinionis, procedit ex suppositione opinionis aliorum communis.* Unde postquam probavit in primo libro de Caelo et Mundo, caelum esse alterius naturae ab elementis, ad veritatis certitudinem iterat considerationem de infinito, ostendens universaliter quod nullum corpus sensibile est infinitum. . .<sup>29</sup>

Thus St. Thomas explicitly recognizes that Aristotle's method is to move toward a solution through a problematical study of various opinions. St. Thomas reads Aristotle's text in the light of this general methodology. Hence when the Thomistic comment is properly read within its full context, it loses its "curious" character and becomes only an instance of a common type of Aristotelian text and Thomistic comment, completely neutral and immaterial for the question of an increasing benevolence—or of any benevolence at all—on the part of St. Thomas.

If the text has any implications concerning St. Thomas's own view, it is that Aristotle had, later in the *Metaphysics*, definitively refuted the separation of the Ideas as held by Plato. This could be confirmed by a long series of texts, for on this point, at least, St. Thomas maintained a consistent opposition to Plato and consistently appealed to Aristotle's refutation.<sup>30</sup>

It is clear, then, that the appearance of evidential relevance for Fabro's thesis was created by citing the text in a truncated form. Had the next four lines been included in the quotation, St. Thomas's own explanation would have made the true import of the text evident even to the casual reader.

<sup>30</sup>See Henle, *Saint Thomas and Platonism*, pp. 351-73.

<sup>31</sup>Fabro refers to these texts either in the body or in the footnotes on pp. 60-61.

<sup>32</sup>Bourke, *Thomistic Bibliography* (St. Louis: THE MODERN SCHOOLMAN, 1945), p. 17; *In Aristotelis Libros De Caelo et Mundo*, ed. Spiazzi (Marietti, 1952), p. xv.

<sup>33</sup>St. Thomas, *In De C. et M.*, I, lect. 4 (ed. Spiazzi, 38)—Simplicius, *Com. Graeci*, VII, 12.16-29; 85.7-9; 86.8-11; I, lect. 6 (60-61)—Simplicius, *ibid.*, VII, 140.9-19; I, lect. 23 (231-33)—Simplicius, *ibid.*, VII, 306.18-307.11; I, lect. 29 (283)—Simplicius, *ibid.*, VII, 301.1-22; II, lect. 1 (297-98) depends substantially on Simplicius, *ibid.*, VII, 376.28-378.22. The attribution to Plato of the doctrine of dependence on a first cause goes beyond the immediate source in Simplicius, II, lect. 10 (384)—Simplicius, *ibid.*, VII, 435.32-436.1 (cf. *ibid.*, 88.5-25; 91.7-20); II, lect. 12 (408)—Simplicius, *ibid.*, VII, 454.23-456.6; II, lect. 21 (490)—Simplicius, *ibid.*, VII, 517.3-519.11.

<sup>34</sup>Paragraph 38, the igneous character of the heavenly body; 231-33, priority (temporal or not?) of unordered to or-

dered motion; 297-98, meaning of Plato's statement that the motion of the heavens is "contra naturam"; 384, contraries in the heavenly bodies; 408, the twofold motion of the stars; 490, revolution of the earth; 584, priority (temporal or not?) of unordered to ordered motion. 228 gives no doctrinal determination. It simply states the conciliatory exegetical principle laid down by Simplicius and contrasts it with the procedure of Alexander.

<sup>35</sup>See Henle, *Saint Thomas and Platonism*, "Analytic Index to the Texts," pp. 255-88, under appropriate headings.

<sup>36</sup>In paragraphs 231-33 and 584 the ordered motion of the heavens is said to be, according to Plato, from God (*a Deo*) and from the first principle (*a primo principio*); in *In II Sent.*, d. 1, q. 1, a. 5, *sol.*, we read: "Alii dixerunt quod res ab aeterno movebantur motu inordinato, et postea reductae sunt ad ordinem, vel casu . . . vel a creatore, et hoc ponit Plato." Here St. Thomas makes no effort to interpret away the temporal priority as, following Simplicius, he does in paragraphs 231-33 and 584; but dependence on God is introduced in all three texts.



B In I *De Caelo et Mundo*, lect. 4 (ed. Spiazzi, No. 38); lect. 6 (60-61); lect. 22 (228); lect. 23 (231); lect. 29 (283). In II *De C. et M.*, lect. 1 (297-98); lect. 10 (384); lect. 12 (408); lect. 21 (490). In III *De C. et M.*, lect. 6 (584); lect. 11. In I *De An.*, lect. 8 (ed. Pirota, 107-8)<sup>81</sup>

The last reference to the commentary on the *De Caelo et Mundo* (Book III, lectio 11) can be immediately eliminated from discussion since it belongs not to St. Thomas but to Petrus de Alvernia.<sup>82</sup>

The general point of all these citations, according to Fabro, is that they show St. Thomas giving a sympathetic interpretation of a point of Platonic doctrine and thereby either saving him from Aristotle's criticism or even reconciling him with Aristotle.

These texts must be considered from three standpoints: (1) the sources, (2) the doctrinal content, and (3) attitude and interpretative method.

### 1) THE SOURCES

The source which St. Thomas used extensively and consistently in his commentary on the *De Caelo et Mundo* was Simplicius. Now in every case the sympathetic interpretation of Plato given or suggested in St. Thomas's text is to be found in the text of Simplicius.<sup>83</sup>

### 2) THE DOCTRINAL CONTENT

Moreover, none of these texts deals with any question of participation, of the theory of ideas, or of Platonic theory of knowledge. For the most part, physical and cosmological theories of quite neutral metaphysical interest are treated;<sup>84</sup> and most of these points are not touched on in early Thomistic works.<sup>85</sup> However, in two cases, a doctrine is reported which is also noted in the *Commentary on the Sentences*.<sup>86</sup> For this doctrinal area, therefore, the texts do not evidence any shift in St. Thomas's attitude but only a material extension of his knowledge of Platonic doctrine and of its possible interpretation.

There is only one metaphysical doctrine that appears in any of these texts. In paragraphs 60-61, 283, 297-98, the theory of the world's dependence in *esse* on a first cause is attributed to Plato. Hence from the standpoint of doctrine these are the only texts from the *Commentary on the De Caelo et Mundo* which are germane to Fabro's thesis. This point will, however, be treated later.

### 3) ATTITUDE AND INTERPRETATIVE METHOD

In order to consider this point, a brief summary of the technique of each text must be given. In paragraph 38, Plato and Aristotle are reconciled by

a sympathetic interpretation of Plato. In 60-61 St. Thomas exempts Plato from Aristotle's critique by (a) determining the exact point attacked by Aristotle and (b) interpreting Plato's intention in a different direction. In 231-33 Plato is exempted from Aristotle's critique by the suggestion of a possible ("Potest etiam intelligi Platonem dedisse intelligere. . .") interpretation for his doctrine; yet, the point is left undecided ("Sed quidquid Plato intellexerit") and Aristotle is said to have argued against Plato's words ("Aristoteles . . . obiiciebat contra id quod verba Platonis exprimunt"). 283 follows the same pattern (but "quidam dicunt" for the "Potest intelligi"). In 297-98 St. Thomas suggests ("sed forte Plato non intellexit . . . sed voluit exprimere") a favorable interpretation. In 384 a statement of Plato (which is not clearly approved) is used to confirm an opinion of Aristotle. In 408 St. Thomas reports Simplicius's ("Dicit etiam Simplicius") explanation of an at least apparent contradiction between Plato and Aristotle. In 490 St. Thomas suggests two possible explanations ("et ideo potest dici . . . vel potest dici. . .") which would excuse Plato and leave Aristotle dealing with his words (" . . . quia possibile erat aliquos false intelligere verba Platonis, Aristoteles removet falsum intellectum qui ex his verbis haberi posset, sicut frequenter consuevit facere circa verba Platonis"). In 584 St. Thomas reports a defense of Plato made by his followers ("Sectatores autem Platonis dicunt eum hoc non intellexisse. . .") and remarks that, in accordance with this defense, Aristotle is arguing, once again, merely against Plato's words (" . . . contra Platoniorum verba, ne ab eis aliquis in errorem inducatur").

#### ANALYSIS OF TECHNIQUES

In this summary various techniques appear.

1. St. Thomas suggests a favorable interpretation of Plato (as in 297-98); this technique even to the verbal signal *forte* already is used in the *Commentary on the Sentences*.

Vel forte intellectum paternum nominat [sc. Plato] intellectum divinum secundum quod in se quodam modo concipit ideam mundi. . .<sup>37</sup>

2. St. Thomas uses a doctrine of Plato (which may not be wholly acceptable) to confirm a positive doctrine. This procedure also appears in the *Commentary on the Sentences*. The Platonic definition of pleasure is

<sup>37</sup>In *I Sent.*, d. 3, q. 1, a. 4 ad 1.

<sup>38</sup>After the exposition of the doctrine, Plato is introduced, in the *Commentary on the Sentences*, by "Unde Plato dixit . . ."; in the *Commentary on the De Caelo et Mundo* by "Unde et Plato dixit . . ."

<sup>39</sup>In *III Sent.*, d. 27, q. 1, a. 2 ad 3.

<sup>40</sup>Simplicius, In *L. De Caelo*, 1 (Com.

*Graeci*, vii, 352.27-33); iii (*ibid.*, vii, 587.37-588.7; 640.27-31).

<sup>41</sup>For example, In *I De An.*, lect. 8 (ed. Pirotta, 107-8); in *III Metaphys.*, lect. 11 (ed. Cathala, 468-71).

<sup>42</sup>In *I Sent.*, d. 8, q. 3, a. 1 ad 2; *ibid.*, 45, q. 1, a. 1 ad 3.

<sup>43</sup>CG, i, cap. 13.

rejected, but it is used (even in the same verbal style<sup>88</sup>) to confirm a statement about pleasure.

. . . delectatio causatur ex conjunctione convenientis. Conveniens enim adveniens perficit id cui advenit et quietat inclinationem in illud. Et haec quietatio secundum quod est percepta est delectatio. *Unde Plato dixit* quod delectatio est 'generatio sensibilis' id est incognita, 'in naturam', idest connaturalis.<sup>89</sup>

3. In four texts of *In De C. et M.*—paragraphs 38, 231-33, 490, 584 (and we might add 60-61)—Plato and Aristotle are reconciled, explicitly or implicitly, by a favorable interpretation of Plato, while, in three of them, Aristotle's critique is explained as being against "verba Platonis ne ab eis aliquis in errorem inducatur."

Now it is true that St. Thomas found an explicit formulation of this technique in Simplicius<sup>40</sup> and repeated the statement both in these texts and elsewhere.<sup>41</sup> Yet the technique is already employed in his early works. Thus in the *Commentary on the Sentences*, in two texts,<sup>42</sup> as we have seen, Plato's doctrine on the self-moved first mover is reconciled with Aristotle's unmoved mover by an interpretation of the word "move" as used by Plato. This reconciliation becomes wholly explicit in the certainly early *Contra Gentiles*.

Sciendum autem quod Plato, qui posuit omne movens moveri, communius accepit nomen motus quam Aristoteles. Aristoteles enim proprie accepit motum, secundum quod est actus existentis in potentia secundum quod huiusmodi: qualiter non est nisi divisibilium et corporum, ut probatur in VI Physic. Secundum Platonem autem movens seipsum non est corpus: accipiebat enim motum pro qualibet operatione, ita quod intelligere et opinari sit quoddam moveri; quem etiam modum loquendi Aristoteles tangit in III de Anima. Secundum hoc ergo dicebat primum movens seipsum movere quod intelligit se et vult vel amat se. Quod in aliquo non repugnat rationibus Aristotelis: nihil enim differt devenire ad aliquod primum quod moveat se, secundum Platonem; et devenire ad primum quod omnino sit immobile, secundum Aristotelem.<sup>43</sup>

Thus in certainly early works, St. Thomas already uses the equivalent to the distinction "intentiones Platonis" and "verba Platonis." Moreover, texts of this sort are scattered through the works; for example, *In B. de Trin.*, q. 5, a. 4 ad 2; *De Pot.*, q. 10, a. 1; *Q. D. de An.*, a. 1; *In VII Phy.*, lect. 1 (ed. Leon. 7); *ST*, I, q. 18, a. 3 ad 1.

It is not surprising, therefore, to find this technique combined with Simplicius's principle at a very appropriate point in the text of the *Commentary on the De Anima* which Fabro cites. For in the *De Anima* St.

Thomas found Aristotle criticizing the circular structure of the soul as developed in the *Timaeus*. On the one hand, all of St. Thomas's sources (including Aristotle) had presented Plato as holding a spiritual soul; on the other hand, Aristotle here in the *De Anima* appears to be arguing seriously against a Platonic theory which made the soul a "magnitude." If indeed the soul were a quantitative magnitude, it would not be spiritual; and this would be irreconcilable with all that St. Thomas knew of Plato's theory of soul.<sup>44</sup> If Plato did not hold the quantitative nature of the soul, how could one explain Aristotle's effort to refute this Platonic position?

The solution which St. Thomas uses and to which Fabro refers is highly ingenious.

Posita opinione Platonis, hic Aristoteles reprobatur eam. Ubi notandum est, quod plerumque quando reprobatur opiniones Platonis, non reprobatur eas quantum ad intentionem Platonis, sed quantum ad sonum verborum ejus. Quod ideo facit, quia Plato habuit malum modum docendi. Omnia enim figurate dicit, et per symbola docet: intendens aliud per verba, quam sonent ipsa verba; sicut quod dixit animam esse circulum. Et ideo ne aliquis propter ipsa verba incidat in errorem, Aristoteles disputat contra eum quantum ad id quod verba ejus sonant.

Ponit autem Aristoteles rationes decem ad destruendum suprapositam opinionem: quarum quaedam sunt contra eum, et quaedam contra verba ejus. Non enim Plato voluit, quod secundum veritatem intellectus esset magnitudo quantitativa, seu circulus, et motus circularis; sed metaphorice hoc attribuit intellectui. Nihilominus tamen Aristoteles, ne aliquis ex hoc erret, disputat contra eum secundum quod verba sonant.<sup>45</sup>

Plato attributed shape and circular motion to the soul only metaphorically—thus Plato's doctrine of the spirituality of the soul is safeguarded; Aristotle, however, to protect those who would read Plato's metaphors literally, refutes the verbal position, not the real intention of Plato—thus Aristotle's critique becomes intelligible and his proper understanding of Plato is vindicated.

From the standpoint of technique and attitude this group of texts is, then, in continuity with a series of texts stretching back to the very beginning of St. Thomas's literary activity. What he found in Simplicius was an

<sup>44</sup>On the spirituality of the soul, cf. Henle, *Saint Thomas and Platonism*, "Analytic Index to the Texts," sub voce "anima." St. Thomas never refers, outside of the *De Anima* commentary, to the doctrine that the soul is a magnitude, and this al-

though he devotes extensive discussions to Plato's theories on the soul.

<sup>45</sup>In *I De An.*, lect. 8 (ed. Pirotta, 107-8).

<sup>46</sup>See Henle, *Saint Thomas and Platonism*, Part Two, *passim*.



explicit formulation of this technique, a formulation which he accepted and cited at appropriate points. However, he continued to use it, even in the *Commentary on the De Caelo et Mundo*, with reserve and caution. Moreover, in a text cited by Fabro, we find him explicitly stating the exegetical principle of Simplicius, placing alongside it the contrary view of Alexander and concluding with this remark: "Quidquid autem horum sit, non est nobis multum curandum." This expression almost of indifference toward the conciliatory method of Simplicius is in perfect accord with the judicious use he makes of the principle and with the reserve, displayed in the texts themselves, which sometimes brings him merely to *report* the interpretation suggested in Simplicius.

#### SUMMARY OF THE ANALYSIS

With regard to the technique displayed in these texts, we are then forced to conclude that St. Thomas throughout maintains a judicious and discriminatory attitude toward Platonic doctrines. He is prepared to reject, to accept, to distinguish, or, through various devices, to interpret benevolently the doctrines of Plato and his followers. No wholesale change in his attitude here appears; neither was he in the beginning a complete opponent of Plato, nor was he at any time determined to save and defend Plato against Aristotle. And it is noteworthy that in all these cases of benevolent interpretation and reconciliation, *it is Plato's doctrine which is re-interpreted and brought in line with Aristotle*, not Aristotle's. This fact alone makes the texts move in a direction contrary to Fabro's argument.

One last point: It might be argued in Fabro's defense that the multiplication of sympathetic and conciliatory texts is still some indication of an "increasing benevolence." However, this increase in number must be viewed against the total background of all Platonic texts. The references to Plato in general increase in the later works (there are some forty texts in the *Commentary on the Sentences*; at least one hundred in the *Summa Theologiae*); within this body of texts, those which seriously criticize or condemn Plato also increase both in number and in importance.<sup>46</sup> Since, then, the number of texts can be seen as a function of the total number of texts, the quantitative argument gives no strength to Fabro's position.

Consideration of the remaining texts in Fabro's second stage, must, for economy's sake, be postponed at this point.

### III. The Third Stage: the *De Substantiis Separatis*

Fabro brings his argument to a climax with a consideration of the *De Substantiis Separatis*. He goes immediately to the third chapter, in which the agreement of Aristotle and Plato is developed. Now, it would seem

obvious that the third chapter must be read in the light of the previous chapters, since this indeed was the order established by St. Thomas himself. If, then, we turn to the first chapter we find here the most elaborate synthesis of Platonic doctrine to be found in the whole Thomistic corpus. Here St. Thomas exploits all his sources and synthesizes the main doctrines of Plato and of the *Platonici* into a philosophical unity,<sup>47</sup> displaying the logical connection of ideas as well as the premises which command and philosophically specify the entire synthesis. The formal structure is, therefore, what I have elsewhere called the *via Platonica*,<sup>48</sup> a philosophical method with specific philosophical principles. At the end of this extended exposition, St. Thomas says:

Hujus autem positionis radix invenitur efficaciam non habere.

The basis for the position has no force; the philosophical soul of the synthesis is not viable.

This text is an echo of St. Thomas's very first analytical critique of Platonism in the *Commentary on the Sentences*:

Horum autem omnium errorum et plurium hujusmodi unum videtur esse principium et fundamentum quo destructo nihil probabilitatis remanet.<sup>49</sup>

These two texts stand respectively at the beginning and the end of a series of texts in which St. Thomas analyzes Plato's basic metaphysics and basic epistemology, and rejects their philosophical foundations (*radix, fundamentum*). I have examined this critique elsewhere and will here assume the results of that study.<sup>50</sup>

This faces us with a problem in St. Thomas. How does it happen that in Chapter Three he uses and approves positions whose philosophical foundations he has destroyed in Chapter One?

I have shown elsewhere that this problem is not limited to the *De Sub-*

<sup>47</sup>See *ibid.*, pp. 243-44, for a listing of the main sources.

<sup>48</sup>*Ibid.*, pp. 322-50; also "Saint Thomas' Methodology in the Treatment of 'Positiones,'" *Gregorianum*, xxxvi (1955), 391-409.

<sup>49</sup>*In II Sent.*, d. 17, q. 1, a. 1, sol.

<sup>50</sup>See note 48, *supra*.

<sup>51</sup>See note 48, *supra*.

<sup>52</sup>Henle, *Saint Thomas and Platonism*, pp. 403-18.

<sup>53</sup>For a full treatment of this text, see *ibid.*, pp. 302-3, and Henle, "Saint Thomas' Methodology in the Treatment of 'Positiones,'" pp. 402-4.

<sup>54</sup>For an extended examination of this question, see Henle, *Saint Thomas and Platonism*, pp. 387-96.

<sup>55</sup>See *ibid.*, "Saint Thomas' Polemical Strategy," pp. 423-25.

<sup>56</sup>Fabro does resume the discussion of these texts in two later sections of his work (pp. 83 and 284). He there recognizes some of the qualifications which must be made (and thereby weakens the argument of pages 57-63); but a thorough examination of his treatment would require a much broader textual base and a much more extended discussion than the limits of the present article allow.

*stantiis Separatis*. I there used a solution presented by St. Thomas himself, the solution based on a distinction between *positiones* and the philosophical method and principles, the *via* and *rationes*, which ground them and give them specific meaning in a philosophical system.<sup>51</sup>

This method for handling *positiones* is almost the reverse of that found in the previous group of texts. For here St. Thomas eliminates precisely the *intentiones* and *rationes* of a position while retaining its obvious verbal formulation.

In the light of this analysis of the *total* situation in the texts of St. Thomas, the third chapter of the *De Substantiis Separatis* must be read as a concordance of *positiones* which have, at least as far as Plato is concerned, been freed from their philosophical foundations and, hence, from their specifically Platonic meaning (at least as St. Thomas understood it).<sup>52</sup>

Hence, the simple appeal to the apparent meaning of the third chapter of the *De Substantiis Separatis* has no evidential force for Fabro's thesis.

We are now in a position to return to the second stage and resume consideration of the remaining texts.

A. ST, I, q. 6, a. 4 ad 12,<sup>53</sup> and In De Div. Nom., Prologus

These are very clear cases of the use of the *positio* treatment. Hence the texts must be read in the same way as the third chapter of the *De Substantiis Separatis*.

B. De Spirit. Creat., a. 10 ad 8

This text handles an objection, developed out of Augustinian citations, against the created character of the agent intellect. It summarizes the positions of Socrates, Plato, Augustine, and Aristotle, and gives, briefly, St. Thomas's critical analysis of the *rationes* of Plato and his understanding of the dependence of Augustine on Plato. It is, in fact, a selective summary of the content of ST, I, q. 84,<sup>54</sup> with which it is wholly consistent and contemporary. The text must, therefore, be read alongside the *Summa* question. Now, St. Thomas clearly and explicitly recognizes a continuity of ideas from Plato to Augustine in regard to theory of knowledge. His procedure here is to acknowledge the relationship, to refute the *rationes* of Plato, and to end with a benign interpretation of the Augustinian citations.<sup>55</sup> This is exactly the procedure of the *De Spiritualibus Creaturis* text. It is the final benign interpretation which Fabro cites but with no reference to this complex background which alone makes it intelligible.<sup>56</sup> The text runs:

Non multum autem refert dicere quod ipsa intelligibilia participantur a Deo vel quod lumen faciens intelligibilia.

It does not make much difference which you say. Why not? Because the

Platonic interpretation is equally sound? But St. Thomas has just refuted this interpretation in the very same text as well as in the running anti-Platonic critique of *ST*, I, q. 84. In what sense then? It must be in the sense of his own theory. More than this, however, in *ibid.*, a. 5, corp., he gives the exact sense in which it can be "said" that "ipsa intelligibilia participantur a Deo." This explanation precisely eliminates the Platonic meaning of the formula while letting it stand verbally.

Fabro calls this text "una frase motto inaspetta." After one has become aware of the strategy St. Thomas follows in dealing with the Platonizing expressions of St. Augustine, one, on the contrary, regularly expects phrases of this sort.

### C. In *L. De Hebdomadibus*, cap. 2

Et nihil differt quantum ad hoc si ponamus illas formas immateriales alterius gradus quam sint rationes horum sensibilibium ut Aristoteles voluit.

In this text Fabro underlines "Et nihil differt quantum ad hoc," yet puts all his emphasis on "nihil differt." The restriction "quantum ad hoc" refers to the argument that separated forms, though simple in some sense, still participate *esse* and so are not truly simple. Obviously, this argument holds whether Platonic or Aristotelian forms are in question, and this is all that St. Thomas is here saying.<sup>57</sup>

<sup>57</sup>To make this obvious, the entire text should be read: "Est tamen considerandum, quod cum simplex dicatur aliquid ex eo quod caret compositione, nihil prohibet aliquid esse secundum quid simplex, inquantum caret aliqua compositione, quod tamen non est omnino simplex: unde ignis et aqua dicuntur simplicia corpora; inquantum carent compositione quae est ex contrariis, quae invenitur in mixtis; quorum tamen unumquodque est compositum tum ex partibus quantitatis, tum etiam ex forma et materia. Si ergo inveniantur aliquae formae non in materia; unaquaeque earum est quidem simplex quantum ad hoc quod caret materia, et per consequens quantitate, quae est dispositio materiae; quia tamen quaelibet forma est determinativa ipsius esse, nulla earum est ipsum esse, sed est habens esse. Puta, secundum opinionem Platonis, ponamus formam immaterialem subsistere, quae sit idea et ratio hominum materialium, et aliam for-

mam quae sit idea et ratio equorum: manifestum erit quod ipsa forma immaterialis subsistens, cum sit quiddam determinatum ad speciem, non est ipsum esse commune, sed participat illud: et nihil differt quantum ad hoc, si ponamus illas formas immateriales altioris gradus quam sint rationes horum sensibilibium, ut Aristoteles voluit: unaquaeque enim illarum, inquantum distinguitur ab alia, quaedam specialis forma est participans ipsum esse; et sic nulla earum erit vere simplex. Id autem erit solum vere simplex, quod non participat esse, non quidem inhaerens, sed subsistens."

<sup>58</sup>The most fully developed statement is *De Sub. Sep.*, cap. 1-2.

<sup>59</sup>"Dicendum quod communis intentio omnium fuit reducere multitudinem in unitatem, et varietatem in uniformitatem, secundum quod possibile esset" (*De Ver.*, q. 5, a. 9, corp.).

<sup>60</sup>*Ibid.*



D. The "dependence on God" in *In I De Caelo et Mundo*, lect. 6 (ed. Spiazzi, 60-61); lect. 29 (283). In *II De Caelo et Mundo*, lect. 1 (297-98); *De Potentia*, q. 3, a. 5

We may also resume here the point previously postponed; namely, the attribution to Plato and/or the *Platonici* of a doctrine of creation. It is indeed clear that St. Thomas came finally to a synthesis of Plato-*Platonici* doctrines in which all the levels of being are reduced to a first "cause."<sup>58</sup> St. Thomas recognizes that the effort to reduce multiplicity to unity is the common aim of all philosophers.<sup>59</sup> The differences arise, however, from the procedure by which this unification is achieved in different philosophies.<sup>60</sup> Granting, then, that in the first synthesis St. Thomas sees Platonism as making all things dependent upon a first principle, the question must be asked: By what procedure and through what principles does he think this is done? This brings us back to the formal analysis of the *via Platonica* and the *rationes Platonis* which specify the Platonic reduction to unity. The formal philosophical principles turn out thus to be invalid, in St. Thomas's view, and to entail, in the conclusions, all those metaphysical and epistemological difficulties which St. Thomas formally points out. This, however, leaves the *positio* itself ambiguous and open to incorporation into a different frame of principles.

There is, then, a certain development on this point beyond the data of the commentary on the *Sentences*, a development in St. Thomas's knowledge of the *positiones* within the Platonic tradition, in his selective synthesis of them, and, finally, in his formal critique of the principles which he finds at the root of all of them.

## Conclusion

We are thus forced to the final verdict that the texts advanced by Fabro in pages 57 to 62, when properly read within the appropriate Thomistic context, do not support his theses: (1) that there is, in St. Thomas, an attitude of increasing benevolence toward Plato, (2) that St. Thomas more and more assimilated Platonic metaphysics, formally as such, into his own system.

Many problems, indeed, remain; and not all the evidence on the general Thomistic-Platonic problem is yet in. Still, on the basis of present evidence, we can say: (1) that St. Thomas's attitude toward Platonic doctrines was, from the first, one of critical discrimination—he approved, distinguished, rejected, as seemed appropriate to each point of doctrine; (2) that his knowledge of Plato and Platonism grew through his years of literary activity; (3) that he devoted more and more attention to Plato and the *Platonici*; (4) that he developed a synthesis of the metaphysical and epistemological

doctrines drawn from Plato and the *Platonici* (the most developed presentation being [for metaphysics] that of the first chapter of the *De Substantiis Separatis* and [for epistemology] that of *ST*, I, q. 84); (5) that he related these syntheses to a method of philosophizing (the *via Platonica*) and a set of principles (the *rationes Platonis*) which he carefully criticized and rejected; (6) that he used (both for Plato and for St. Augustine) a *via-positio* technique which enabled him to reject the philosophy of a *positio* while yet retaining and approving the *positio* itself.

In addition, this short study has, perhaps, illustrated the difficulties involved in drawing generalizations from isolated Thomistic texts. No doubt, this study itself has not avoided all the pitfalls in the interpreter's path; yet, it may be hoped that comprehensive and co-operative efforts of this sort may bring us to establish a more scientific methodology for the reading of St. Thomas and a more exact understanding of his authentic meaning.

## The Nature of Metaphor: Further Considerations

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In *Philosophical Studies* for December, 1955, Mr. Michael Slattery, in an article titled "Metaphor and Metaphysics," sets forth a theory of metaphor and takes exception to the theory which I propounded in *THE MODERN SCHOOLMAN* in May, 1954. I believe that a consideration of Mr. Slattery's theory and a further statement of my own may possibly cast a beam of light in the direction of this mysterious and difficult problem.

In Mr. Slattery's view, metaphor presents no problem to the metaphysician, and therefore the solution is merely to perceive this fact. When I say, "That man is a lion," I do not mean, Mr. Slattery tells me, that the man is a lion. I intend to say that the man is a possessor of lordly courage. If I should object that the word "lion" does not mean "possessor of lordly courage" but signifies a supposit with the nature of the wild beast so named, Mr. Slattery would respond that such is the meaning of the term in literal speech but that its "metaphorical" meaning is "possessor of lordly courage."

My first ground for disagreeing with Mr. Slattery's view is that it seems to me to violate the rights of words. In order to save the metaphorical proposition from the charge of unintelligibility, he follows Humpty Dumpty's practice of making words mean precisely what he chooses. No matter how noble his goal, this appears to me an inadmissible and destructive means.

Mr. Slattery presumes that metaphorical propositions, like literal ones, do give expression to our abstract knowledge of things and are *therefore* of value. If they do not express clear knowledge, then they are false and valueless, or, as Plato thought, poisonous. Mr. Slattery intends to save them from this charge, to show that they do have an intelligible, scientific value in expressing knowledge. He does not start with an examination of metaphor, to see whether perhaps it is unique in human speech, to investigate why science rigorously excludes metaphor from its propositions, to ponder why poets and madmen seek out such strange predications; he does not speculate on the possibility of speech's giving expression, not to abstract thought, but to vision. He starts with the universal principle that metaphors are "informative expressions of thought" aimed at "enabling us to think and converse more easily" about objects and qualities. If that is true, then metaphors must be, as Mr. Slattery thinks that they are, literal statements superficially disguised. But happily for metaphor, if unhappily for science, that is not true.

Mr. Slattery wishes to base his theory on the teaching of St. Thomas. He refers to the standard texts—*De Veritate*, q. 2, a. 11; *Contra Gentiles*, I, cap. 30; *Summa Theologiae*, I, q. 13, a. 6. But he fails to prove or even to discuss the important point that the *metaphora* of St. Thomas, which I believe that we would translate “figures of speech,” are the same “metaphors” of which he himself wishes to speak. Nor does he make clear that the perfect and imperfect forms of the analogy of proportionality of which he speaks are drawn from the teachings of St. Thomas. His remarks smack of Cajetan’s doctrine on metaphor to me; and I believe that I could show, if that were my purpose here, that Cajetan’s analogy of improper proportionality—at least as that is understood by some of his modern followers—is not really drawn from the teaching of St. Thomas but is as a matter of fact contradictory to St. Thomas’s Thomism. At any rate, those points are among essential premises to any claim that one’s teaching is based on that of St. Thomas, and Mr. Slattery is anything but clear about them.

Furthermore, important differences which I seem to detect between St. Thomas’s teaching and Mr. Slattery’s make me question whether St. Thomas’s metaphysics really is the framework for Mr. Slattery’s theory, as he claims. For Mr. Slattery, if I interpret his statements correctly, being is a genus. He states that for St. Thomas all things have one basic similarity; they are all beings. As beings, they all have a similarity in common, but they do not have this being in precisely the same manner.

Being, then, is an analogous term, he claims, just as “animal” is. Animal means the same thing for all animals; but when applied to two different kinds of animals, it does not, Mr. Slattery asserts, mean *precisely* the same thing and is thus an analogous term. So the term “being,” in Mr. Slattery’s words, “cannot mean precisely the same thing when describing a dog and a colour since they do not have precisely the same manner of being.” Note that “being” *describes* various beings and means something different in each case because different beings have somewhat different *manners* of being. Thus, like “animal,” “being” is for Mr. Slattery a term proportioned to its subject, by which he appears to mean that the same term acquires a somewhat different meaning when it is predicated of each new subject. Such a term is, for Mr. Slattery, analogous.

Mr. Slattery further asserts that in every proportionality there are only three elements, since the predicate is analogically common to both subjects. He gives as an example, “Men exist and stones exist,” which can also be stated, “Men and stones exist.” Clearly then, Mr. Slattery opines, the term “exist” is one term for the two subjects. A fourth element does not arise, in his opinion, until we consider and “distinguish the difference *within*



*the similarity.*" The act of existence of men and stones—apparently the same act under the general meaning of "exist"—is at different levels; so, though that common act can be said to be indistinguishable under one aspect, in Mr. Slattery's thought, it is not so under another; and thus "for the sake of truth, a distinction must be made between" the two acts of existence.

I am laboring to be fair to Mr. Slattery's thought and at the same time limit my discussion to those points on which it seems to me that I note his striking differences from St. Thomas's teaching and (more important) from the truth of the matter. For St. Thomas, as I understand his teaching on the matter, proportionality is different from proportion precisely in the point that when beings are considered strictly under the formality of proportionality, no relation whatever exists *between* the two distinct beings involved in the analogy (see *De Veritate*, q. 2, a. 11). The analogy of proportionality does not refer in any way to *something* shared by all the analogates. The analogy does not lie, then, in any *term* but in the intrinsic relation which exists *in* (not *between*) the beings. Therefore the term "exist," in Mr. Slattery's example, is not an "analogous" term, as he thinks it is.

To speak of analogous, univocal, and equivocal terms involves the literal meaning of those terms in relation to the things they signify. The term can be said to be absolutely univocal if it always means the same thing in relation to the object signified. Thus any term expressive of any category will retain the limits of that category and will in this respect be univocal.

Equivocal terms signify different objects without reference to any similarity between those objects.

Analogous *terms* would thus signify some sameness shared by two different objects. If it is granted that both share the perfection named, then the perfection would have to be *in* each. The required sameness cannot be existential, obviously, since then the "two" objects would not be "two" and the term would clearly name the univocal perfection of one object. If the perfection is existentially different but formally the same, as "black" is in horse-hair and in the ace of spades, the term could be said to be analogous. But this is true of the term in predication *only*. In itself it is univocal, like every term that signifies a formal perfection, such as "courage," "lordly," and so on.

"Exist" does not refer to a formal perfection. There is no community in acts of existence that makes it possible for us to categorize them or to refer to something *in* each by which they could be said to be "somewhat the same." The term "exist" refers to that act which makes an essence to be; and thus we can "conceptualize" and arrive at a meaning for the term based on its necessary relation to essence, not by abstracting the perfection

from a being (as we abstract forms from beings), but by considering the judgment that we make, "That being exists," which states an intrinsic relation in the being between its essence and its act of existence.

Thus the term "exist" has one meaning in itself and many meanings in application. But it is not analogous as are terms referring to limitation or imperfection, which, according to St. Thomas in *De Veritate*, q. 2, a. 11, can be components of an analogy of proportionality. This type of proportionality, since material objects are our proper objects and our "figures of speech" are drawn from our proper knowledge, forms the analogy of *metaphora* in St. Thomas's sense of that word. Such terms as "lion," "stone," and so on, referring to *limited* beings necessarily, have some formal element which remains univocally the same in all predications. This is not true of terms which—like "being," "good," "exist," and so on—have *no* formal element which remains the same but take all their literal meaning from the being which *is*. Predicates like "good," "true," and so on, bring in a relation between the thing and a mind but refer to no formal perfection *in* the being. They consider the being as a being. These are the terms of that analogy of proportionality which St. Thomas considers as the analogy by which we may speak of God and creatures as beings, as good, and so on. As in all proportionality, there is *under this formality* no community whatever *between* the beings involved. But in this type of the analogy, dealing with terms not involving necessary limitation, there is no formal element of any kind that has to be excluded from the analogy.

My contention is that the metaphorical judgment does not deal with analogy and furthermore does not intend to state any relation which exists in or between beings in reality. Its unique and profoundly unscientific purpose is to express a relation which is founded both in reality and in the mind (and imagination). Hence, since metaphor does not express reality as it is, it is not science and is, in its proper purpose, *opposed* to science. For this reason, St. Thomas does not have occasion to treat it as it is in itself, since he deals exclusively with science. His purpose is to show the relation of *metaphora* to science; and thus, insofar as he treats the metaphor of this article, he is *more* occupied with showing what it is not than with revealing what it is.

The metaphorical judgment, unlike literal judgments, does not tell us under what formality the speaker has seized the subject named. It tells us that the speaker is rejecting every formality which is proper to that subject and wants to express to himself and to us the object named *as he sees it*, not alone as it is in itself. He is not concerned with scientific truth but with metaphorical truth (or, in somewhat paradoxical terms, with emotional as well as with scientific truth). Until we see the effect as he sees it, we

have no definite meaning for our metaphorical judgment; *when* we see the effect as he sees it, we know the object as it is *in him*. If his cognitive and emotional faculties are in healthy mental and physical condition, and if he shows himself and us honestly what he is seeing, we will see a strange and (outside metaphor) contradictory being.

This vision to which the metaphorical judgment urges the mind is not scientific knowledge. It derives from an *unscientific* process, a struggle to *avoid* the universal. The metaphorical judgment can, under proper conditions, be useful to the scientist, as St. Thomas points out in *Summa Theologiae*, I, q. 1, a. 9, in regard to the *metaphora* of Scripture. Such figures of speech, though "hiding the truth" (as the metaphor of which I treat, considered in relation to science, certainly does), can, in union with definite, objective, and safe literal statements in other parts of revelation, give rise to scientific knowledge. It should be carefully noted, however, that St. Thomas is not discussing in this text or, so far as I know, elsewhere, what the figures of speech are intended to accomplish in themselves but merely what reference they have to the *science* of theology. His discussion of them will help us to see what, in his mind, metaphors are *not*; but it will be worse than misleading if we suppose, as some philosophers have, that he is trying to tell us *all* that metaphors *are*.

Many theologians and philosophers, insofar as I have been able to determine, have been prone to derive an erroneous conclusion from St. Thomas's statement in *Summa Theologiae*, I, q. 1, a. 9. They suppose, like Mr. Slattery, that if I can in some way deduce scientific knowledge from *metaphora*, then the *metaphora* must somehow contain the scientific knowledge. Thus one would be forced to admit either that metaphors are disguised literal statements or that some distinction must be made between the metaphorical and literal meanings of a metaphor.

I deny the supposition that scientific knowledge is deduced in any way from the metaphorical judgment. Metaphor has as its sole aim the pointing of the mind at an existing object for the purpose of contemplating the contingent, acting object under a formality supplied by the contemplating intellect. Object and intellect fuse in the white-hot intuition of the intellectualized sense, which touches a characteristic act of the object. The intellect responds with an adequate but alien formality in an effort to express that nonabstractive intuition. Thus metaphor is formed, with its sole aim the pointing of the mind at an existing object for the purpose of contemplation. If the contemplation is achieved, then from *it* a scientific proposition might be deduced, if one wished to do so. If the contemplation is not achieved, then the metaphorical judgment has failed in its sole aim, and no grounds for scientific deduction exist. If science is to use



metaphor at all, then its operation must proceed from the act of contemplation, not from the metaphorical judgment. The individual *terms* of that judgment are indeed independently intelligible; but the metaphorical judgment itself has no definite intelligibility apart from the situation which it expresses—the existing and acting object seen and responded to by a unique, nonabstractive, unclear, satisfying contemplation of the intellectualized sense.

I cannot agree, as I have indicated, that Mr. Slattery reflects St. Thomas's teaching when he regards "animal" as an analogous term in its application to *animals*. As I view the matter, the term enters into analogy only when it is applied to beings which are *not* animals. It seems to me that Mr. Slattery is confusing the real and the logical orders, and is supposing that "animal" is a term which includes "being an animal," "analogousness," "all species of animal," and so on, in itself on the basis of the sentient perfection each animal has.

Likewise, I believe that Mr. Slattery supposes that "being" is a term containing all beings in itself, on the basis of the perfection of existence each being has. This is not St. Thomas's teaching. Yet I can see no other possibility for explaining Mr. Slattery's statement that the verb "exist" can be considered in some aspect a common term for stones and men, except on the basis of supposing that he considers stones and men to possess a perfection of being which is in some aspect the same.

Mr. Slattery evidently thinks that the "somewhat the same" aspect of analogy applies to the *terms* as well as to the *beings* involved in proportionality and does not realize that the terms on each side of the analogy of proportionality have meaning only in relation to one another, none in relation to the terms on the other side. Neither "God" nor "exists" on one side of the analogy have, under the formality of the analogy of proper proportionality, any meaning in relation to "men" or "exist" on the other side. The two "exists" have *in this analogy* no community whatever, as the two nouns have no community. Only the fact that the two beings have an intrinsic relation—one a "relation" of identity and the other a real relation between *esse* and essence—makes it possible to say that both are beings. But there is no relation whatever *between* them, on the basis of *this* analogy. We are not speaking here of that analogy which considers necessary and contingent being, infinite and finite being, caused and uncaused being, or of any other analogy except that which considers being as being. And if it were not true that this analogy left beings absolutely distinct and unrelated, we would be speaking of God and creatures as sharing in some community of perfection.



Toward this terrible reef, against which St. Thomas so pointedly warns and which *his* analogy of proportionality avoids, Mr. Slattery, as I chart his course, inevitably steers. I believe that Mr. Slattery's radical differences from St. Thomas's teaching are revealed in his early statement that St. Thomas sees things as similar in that they are beings. But for St. Thomas, as I read him, things are not similar in *being*, considered absolutely, as it is in the analogy of proper proportionality; they are rather dissimilar, though similarity or lack of it seems to me irrelevant in this context. The analogy of proper proportionality is based on a relation intrinsic to each being, not on any relation *between* beings. As we have seen, each being, in being a being (not "caused" or "finite" but simply a being), is autonomous and distinct. It is certainly not similar to other beings on the basis of being a being. Only if being were a genus, something shared in by many, would Mr. Slattery be correct; but reality would then be contradictory. Among other things, as I pointed out above, God would then be similar to other beings on the basis of being.

Mr. Slattery, as I understand his statements, assents to that last proposition. He says:

For this reason all creatures, in respect of existence, can metaphorically be called divine, since by their existence, no matter at what grade it is, they are similar to God. Conversely, all names which apply to created grades of being can be applied metaphorically to God, since God is in some way like each existing creature: "Every agent produces an effect similar to itself."

To state that names of creatures can be metaphorically applied to God *because* He is like creatures and to make that statement as the *converse* of the statement that creatures are like God on the basis of existence, seems to mean, if human language is to be taken seriously, that God is like creatures on the basis of existence and that there is real relation in God. If Mr. Slattery were thinking of the relation of reason which St. Thomas discusses in *Summa Theologiae*, I, q. 13, a. 6, and elsewhere, he would not be able to speak of the *converse* of a real relation.

Further, the principle of causality which Mr. Slattery cites, as a demonstration that God is like creatures, reveals once more that Mr. Slattery conceives of being as a shared perfection. If beings are similar in being, then God is certainly similar to other beings. And, Mr. Slattery indicates, since God is the agent who produces being in all beings and since this common effect emanates from God, then, in Mr. Slattery's view, God is in some way like each being. If being is a common perfection by which things are similar, it follows quite logically that the Cause of this perfection must be like the perfections that He causes.

Such again is not the teaching of St. Thomas. Mr. Slattery might well consider the text that he recommends to his readers: "Deus nullo modo similis creaturis dicendus est, sed creaturae similes possunt dici Deo aliquo modo" (*De Veritate*, q. 2, a. 11 ad 1). Since Mr. Slattery, in his article, seems to think only of extrinsic and reciprocal relations, he may think that when the text says that creatures are like God, it must follow as the night the day that God is like creatures. But if he compares his "in some way like" with St. Thomas's absolute "nullo modo similis," he will at least not attribute his own view of God, of being, of metaphor and metaphysics, to St. Thomas.

"Being" refers to the total existent, not to any perfection which comes to the thing from an agent. "Being" has no reference to a cause, no implication of relation to anything else. "Beings" are neither similar nor different, when taken absolutely as beings. They simply are. They do not, considered absolutely as beings, share anything. As beings, they are neither one nor many. The term "being" does not refer to such matters. It is not a genus. It does not deal with extrinsic relations—real, attributed, or rational. It is not conceptual. It does not refer to a form, as do all nouns based on abstraction. It refers to what is known and expressed only in the *judgment* "The thing is," not to what is known and expressed in a *term*. It deals only with the existent in itself.

Thus Mr. Slattery's first principle, that things are similar in being, appears to me to be wrong; and judgments based on that principle will therefore be, in my judgment, *per se* wrong. It appears to me that just as he categorizes "being" as a common perfection which is applied to individual beings on various levels or grades, so he categorizes all other predicates of beings. Into this confusion he introduces the term "analogous," so that for him the term "animal," because it can be predicated of different species of animal, becomes an "analogous term." For St. Thomas, as I pointed out above, "animal" is a univocal term meaning always "supposit with sentient nature." The fact that it can be applied to different species does not affect its meaning or make it analogous in itself. Mr. Slattery, in accord with what I take to be a misconception of being, ignores the "is" of the judgment, and appears to think that terms carry within themselves not only form but also existence, analogousness or univocity, literal and metaphorical meanings, and perhaps other things.

As I see the matter, the subject-plus-is of the proposition expresses the being, and the predicate noun, if any, expresses the formality under which the intellect is seizing that being. The work of that predicate noun is to express a determined form, and, as I see it, that is all that it can do. Existence, analogousness, "metaphorical" meanings, and other items, rise out

of the judgment, not out of the term. It is of the essence of every term, except those that express existence, to express a determined form. When it ceases to express that form, it has been destroyed.

To form a metaphor, Mr. Slattery "widens" the predicate noun until it expresses something quite other than the form which it literally signifies. In "That man is a lion," the noun "lion" is "widened" until it means "possessor of lordly courage." As I picture Mr. Slattery's process, he appears to think that buried in the term is a genus. After the tight-fitting formal limits of the term are spread apart, the species drops out and leaves only the genus "supposit," with a striking property which somehow got stuck in that genus. This appears to me to be erroneous and, if it were taken seriously, dangerously so, since it is a basic attack on the objectivity of human speech. Mr. Slattery admits that we may, if we like, say that the term "lion" has been misused. "And yet it has been misused to a good purpose," he points out. I do not agree.

For an attack on the real problem of metaphor, a philosopher must first look at the situation with which metaphor confronts him. In this proposition, "That man is a lion," he is confronted with a being, "That man is," and with a formality which does not belong to that being. The mind appears to be revealing that it has seized that being under the formality expressed in the term "lion." It is a desperate and irrational solution which destroys the term in order to save the truth of the proposition, as Mr. Slattery does. Far better to leave the matter unsolved. Yet there is a solution which respects the terms, which does not ignore the "is" and its implications, which explains both agent and end, which provides, in brief, a definition of metaphor. My explication of this solution in my previous article was certainly not clear to Mr. Slattery, perhaps because of our radically different notions of being and of relation, of the distinctions between being and predication, between reality and categories, between the various kinds of analogy of being and analogous (as opposed to univocal) terms. Agreement on all of these notions as well as others I was forced to presuppose, since I was not writing a complete exposition of metaphysics but a mere explanation of metaphor. However, my treatment may be less opaque if I take another approach and briefly outline, from a psychological start, what actually happens when the mind produces a metaphor, as I conceive the matter.

Let us suppose that I visit a friend in a large office, and while we converse, the boss emerges and in a loud voice demands more quiet, glares in intimidating fury about the room, and retires. I have now perceived in this individual man the quality of producing loud noises in order to frighten and subdue his subordinates. I do not arrive at this perception through

argumentation; I intuit the acting being with my intellectualized senses of sight, hearing, and others less obviously in act. Instead of using this contact with reality for scientific purposes, I remain in its murky yet vivid insight and contemplate the acting being and his effect on the others. I respond emotionally to this individual acting being until his act expands in my sight and appears to be out of proportion to the man's own nature. Hence, with my eye still fixed on that individual acting being, I ask myself, What nature *is* that act proportioned to? Then, from the store of bare natures in my mind, I can try several for size. A dog? That would fit if my emotional reaction were moderate and I could use a common cliché to express my vision. But if I perceive and perhaps feel great fear, and if complete silence results, and if the man's voice was extraordinarily loud, then a dog's nature will perhaps appear inadequate. A lion? Yes, that fits. Since this act is now seen as the act of a lion, and the act inheres in this man, then this man is a lion.

What do I mean by that proposition? Since I reject absolutely all such distinctions as those of Mr. Slattery between "literal" and "metaphorical" meanings of terms, I mean that the man is operating by the nature of a lion; so that by the term "lion" I mean quite literally what the term always means, a supposit operating with the nature of the beast so named. That meaning becomes more evident when I find that as a result of this predication, the boss's office becomes a lair or a den, the subordinates become sheep or prey, and so on. I certainly do not mean that the boss is the subject of "lordly courage." I do mean that he is a lion.

Mr. Slattery, like many other philosophers who have tackled this question, wishes at all costs to avoid the clear contradiction that he perceives (or perhaps better, senses) in the metaphorical judgment. Certainly the metaphorical proposition, taken by itself, does not convey definite intelligibility at all. Not only does it *not* make thought and converse easier (Mr. Slattery's desideratum), but it makes both impossible. All that my hearer can do to understand me is to *look at* the subject. I have not departed from my original intuition of the reality; if my hearer is to join me, he must share the darkness and the ineffability of that contemplation. My whole aim is to express what I am seeing and reacting to, and in no way can my hearer understand me but by seeing what I see and reacting as I react. This is the artistic approach to reality, and it is opposed to the philosophic. Until a philosopher realizes that fact, he will not be in a position to philosophize on metaphor.

If the metaphorical proposition did follow from the philosophical process and aim, then it would be a monstrous failure, since it is not in any sense a clear expression of the universal. More, it would involve a real contra-



diction. There could be no scientific justification for supplying an alien nature to this existing and acting supposit, since no such thing can possibly exist in reality. Nor, since it is a contradiction in any scientific sense, could it exist in the imagination, like a chimera or a satyr, since those are imagined with their own proper natures. On philosophical grounds, the metaphor indeed posits a real contradiction, since a finite act of existence cannot in reality actuate an alien nature. (An infinite act of existence could, as I pointed out in my previous article; Mr. Slattery did not see the point of my discussion of the Incarnation.) This real contradiction would operate on the level of nature, since only a substitution of natures, not of supposit or of accident, is involved. The mind, if it wishes to treat the predicate of the metaphor as a formality under which the being is seized, cannot operate. If, like Mr. Slattery, it feels that it cannot properly treat the predicate in any other way, it is stopped. Then it can deny the proposition as nonsense; or it can proceed by destroying the term and imposing a formal significance which will make sense of the proposition, as Mr. Slattery does; or it can take the unscientific and correct procedure of peering into reality outside itself, into the darkness of material opacity, and in the flash of light which it itself provides in its metaphor, in union with the imagination and the senses, of *seeing* the contingent and individual basis for the predication there. Since that basis *cannot* be conceptualized, converse is impossible; and contemplation, not (unhappily) of being, but of a reflection, a flash, a passing effect of being, is momentarily achieved. It is not much, but it is better than nothing and immeasurably more satisfactory to our *heart* (if not to our *brain*) than is the purest clarity of science.

The problem of metaphor, then, lies in the judgment, not in the term. In "That man is a lion," the supposit involved in the term "lion" is not an individual lion, as it always is in reality; in this judgment, the supposit involved in the term "lion" is a human person. This judgment is evidently false as a scientific statement about reality; but it is perfectly true, granted the expanded and unproportionate quality which the man is exhibiting. Hence it should be clear that while the statement is false on scientific grounds, it is true for the man as he exists in my immediate perception of him and immediate reaction to him. It will be true also to those who perceive and react as I do, and only to those.

The metaphorical judgment has no determined meaning apart from the individual accident of the subject as that accident exists in the maker of the metaphor. The exact meaning of the metaphor can never be determined unless one *sees* the subject as the metaphor-maker sees it. This fact is a scandal to many scientists and has led to solutions like Mr. Slattery's which attempt to fix a determined "metaphorical" meaning which the words can

carry with them. But metaphor does not aim at discursive meaning; it aims at vision. It does not intend to tell us anything but to make us look at something. Good critics, who look at metaphors first and consider them in reality undetermined by pseudo-universal principles, realize this; and sometimes, like John Crowe Ransom in *The World's Body* (New York, 1938, p. 142), they are able to express it (by "miraculism" here Mr. Ransom refers to the phenomenon called metaphor in this article):

For scientific predication concludes an act of attention but miraculism initiates one. It leaves us looking, marvelling, and revelling in the thick *dinglich* substance that has just received its strange representation.

Metaphor does not aim at definite meaning and therefore does not stop there. Unlike literal predication, whose term is the mind's seizure of reality, the term of metaphor remains outside the mind wholly. It is not the object as adequately *known*, the aim of science; it is the individual being as vividly *contemplated*, the aim of metaphor.

Thus the mind does not want to offer, in metaphor, a rational meaning at which the mind can stop. It delights in offering a proposition which forces the mind to peer into the fascinating and shadowy maze of reality to see *there* what the solution is.

And the answer must lie in the individual quality of the real being as that quality exists in the intellectualized sense of the excited observer. The heart, the will, the emotions, enter in and expand the quality in the observer. Out of his love or fear or hate he sees this quality as larger or smaller than it really is. And unless he sees it this way, the metaphor could not come into being. Only a literal proposition could emerge from clear vision. The metaphor can germinate and live only in the essentially unclear intuition of the intellectualized sense, when the dynamic act of the object finds there a dynamic response from the contemplator.

<sup>1</sup>This is the point I was trying to make in my discussion, in my previous article, of "Grace washes the soul." Mr. Slattery appears to be under the impression that I was making an attack on some "traditional" interpretation of that metaphor. I was speaking of the traditional approach to metaphor itself, not to that metaphor. I know of no tradition of analysis of that metaphor, and I do not believe that there is any. Hence I do not think that I was attacking one. My purpose in discussing it at all was merely to point out that behind "Grace washes" lies the metaphor

"Grace is water," since washing is proper to water and not proper to grace. My statement that grace necessarily exists merely means that in my predication of action to grace, I am stating that grace exists. If it did not exist, it would not act; but it is washing; therefore it exists. Mr. Slattery's difficulty about whether it exists in reality or not is irrelevant. Whether it does or not, it certainly exists in my proposition, as the subject of action and as the essential potency actuated by its "is."

When I *see* the quality of frightening noise in the man and I love or fear or hate or admire, my mind seeks metaphor. I may say, "What's he roaring about?" and behind that predication is the metaphor, "The man is a lion." I can predicate that nature of him because it is the nature that seems best proportioned to his quality as that quality exists in me. If I am not moved to expand the quality, then I can never make a metaphor but must speak only of a man; I could make a simile, which would speak of the man as a man, but I could not make a metaphor, which would speak of the man as a lion.<sup>1</sup>

The confusion of the real order with the conceptual order is a constant danger in the analysis of (not in the composition of, or the normal reaction to) metaphor, since the form is that of all judgment and the conceptualizing mind tends to think that the sole function of language and of judgment is to express the *knowledge* of the real. The creative process by which the mind expresses a vision in terms not only of the intuition of the intellectualized sense but also in terms of the spirit's emotional reaction to the reality seen, the metaphorical process, seems not within the ken of such analysts.

Starting with metaphors themselves rather than with presupposed principles does not always ensure success, however. A critic like the gifted Mr. Empson starts with metaphor, but he does not arrive at a definition of metaphor. Unable to grasp that the predicate of the metaphorical judgment exists in an absolutely unique and totally contingent manner in that judgment, he removes it in order to examine it more closely, automatically furnishes it with its own "is" in order to keep it alive, and destroys even the remote possibility of seeing the metaphor as it really is. When the predicate of metaphor becomes the subject of an "is," it is intelligible and can acquire predicates, but it can never be what it was in the metaphorical judgment. Mr. Empson, in his analyses, treats only of simile, since by his inability to see that this judgment of metaphor does not aim to convey definite *meaning*, he joins Mr. Slattery in destroying it. He does not, it is true, destroy the predicate in order to preserve the intelligible value of the proposition, as Mr. Slattery does; but he does "rescue" the predicate from its strange and unintelligible situation into a proper existential world once more and thus by a different means achieves with Mr. Slattery the annihilation of metaphor.

Philosophers and critics must learn, if they are to treat of the nature of metaphor, that the mind does not aim at conveying definite, scientific meaning in its metaphorical product. It aims at expressing vision; and the reason why the mind produces metaphor is proximately that the mind must find a means of expressing the emotional reaction as well as the knowledge of

the spirit, and ultimately that the mind is the faculty of being, not of concept.

When the mind abstracts and expresses its seizure of the real in a literal statement, it necessarily expresses only a partial seizure of the real. The opaque nature of its proper object, material being, resists the natural desire of our intellects to grasp the being, the individual real thing. Further, our spirits in knowing their proper objects, operate in union with our sense faculties; so that when we express our intellectual grasp of the subject of knowledge, we express in the existential judgment a being that the intellect cannot fully grasp, and, in every predicate we add to that judgment, we express a formality under which the intellect seizes that being. The intellect certainly can know singulars, but it cannot reduce them to its own terms so that it can make an intelligible statement about them and still grasp them totally as singular beings. This situation becomes frustrating when under the stress of powerful emotion we feel that we must seize and express the real thing that we see as it really is and not under some formality which expresses only a partial intellectual grasp.

When we are in this situation, we can do one of two things. We can suppress the emotion, keep our knowledge in balance, and express our scientific *meaning* in literal statement, with the intellect resisting the emotional reaction. Or under the force of our emotion, we can see the qualities of the thing as unique and disproportionate to its nature, throw our knowledge out of balance by resisting the intellect's tendency to supply only predicates abstracted from the being, and supply an alien nature to the thing. This does not then express the real being as it is in reality, but it does point with emotional vigor to the real qualities of the thing as we see them.

In my normal abstractive process, I cannot get the individual into my mind; so, by making a judgment which is not literally a judgment, not really expressive of a formality by which I grasp the thing, I point my mind out toward the individual. To speak of the process as a subterfuge of the mind, as I tend to do, is misleading, since it implies that the formation of a literal statement is the *normal* work of the mind and that the formation of metaphor is some sort of trick. This reveals a philosopher's bias, since philosophers have not yet managed to take time out to examine metaphors seriously, in their own habitat, which is antipodal to science. Metaphors appear to be upside down to philosophers, but human minds produce them more readily than they do literal statements. The mind must labor to be clear and scientific, but a truck driver who inadvertently dents a fender will hear a readily-formed torrent of metaphor. Sports writers would be helpless without metaphor, and poets would not exist at all.



It is vitally important to observe that metaphor can operate only while the *vision* lasts. When the mind no longer, under the influence of emotion, *sees* the unique quality or qualities of the object as disproportioned to it, then the metaphor disintegrates into mere contradictory elements, and the vision is finished. The mind and imagination, the emotions, the object, must all be operating together on one another in order to keep the metaphor in existence; and it exists only when they are all operative. The object also operates by exhibiting its unique qualities to us, as Mr. Slattery very rightly stresses in his final paragraph, and it must be actually operating in reality or in our imaginations to keep the metaphor in existence.

Metaphor is as passing and as contingent as finite act and quality. It has none of the eternal element of the literal statement. It deals with the individual, not with the universal. It is pathetic as a means of knowledge.

But it is powerful as a means of vision, seething, as our greatest poet tells us, from those shaping fantasies that apprehend more than cool reason ever comprehends. Ironically spoken by the practical man, Theseus, who condemns these "tricks" of imagination, Shakespeare's words express how shaping fantasy can, under the influence of emotion, fuse the forms of the mind with the things that he sees in an organic unity of metaphor, the dwelling of airy nothings:

Lovers and madmen have such seething brains,  
Such shaping fantasies, that apprehend  
More than cool reason ever comprehends.  
The lunatic, the lover, and the poet  
Are of imagination all compact. . . .  
The poet's eye, in a fine frenzy rolling,  
Doth glance from heaven to earth, from earth to heaven,  
And as imagination bodies forth  
The forms of things unknown, the poet's pen  
Turns them to shapes, and gives to airy nothing  
A local habitation and a name.  
Such tricks hath strong imagination  
That if it would but apprehend some joy,  
It comprehends some bringer of that joy;  
Or in the night, imagining some fear,  
How easy is a bush supposed a bear!

—*Midsummer Night's Dream*, Act 5, scene 1.

How easy, indeed! The philosopher must sit at the feet of the poet to learn the nature of metaphor. If he will do that, he may realize that there are more approaches to reality than are dreamt of in his philosophy. He

will be in a position to discover what the thing is in itself; he will experience it in its unique reality; and he will be then in a position to philosophize about it. But he must humble his pride, or, perhaps, enlarge his horizons beyond the limits of science, and learn as an enraptured hearer, sharing the poet's fine frenzy, what only the poet can teach him. Then the philosopher will be able to realize that this scientific monstrosity, metaphor, brings to human minds a flicker of reflection of the glory of being. It does not deserve either the contempt or the bungling abuse of science, because, though it offers to accidental being only a passing habitation and a contingent name, it nevertheless gives a draught of satisfaction to the faculty of being which thirsts above all things to contemplate beings and Being.

## Reply to Father Boyle

M. P. SLATTERY, *College of St. Thomas*

I extend my thanks to Father Boyle for his comments and to the editor for the space he has placed at my disposal.

Concerning the proposition "That man is a lion," Father Boyle says: "I mean quite literally what the term always means, a supposit operating with the nature of the beast so named. . . . I do mean that he is a lion." If this really is the case, then I have no alternative but to refer Father Boyle to a textbook of zoology. Unfortunately even this will be of no avail, since Father Boyle already accepts the fact "that there could be no scientific justification" for making the above assertion and that "on philosophical grounds the metaphor indeed posits a real contradiction." Such an admission seems to make his whole theory untenable.

Father Boyle also insists: "I reject absolutely all such distinctions as those of Mr. Slattery between 'literal' and 'metaphorical' meanings of terms." In this case it is difficult to see why he should think it necessary to mention metaphor at all. Why not exclude it completely from the class of figures of speech?

But we have to discuss an even more radical element in Father Boyle's thought; and for this we must accompany him in his description of the psychological process which results in metaphor. We see the office boss—to use his own illustration—and something about the boss reminds us of a lion. The first image we have in our minds is that of a human being, a man. Then something about this man reminds us of a lion. This reminding consists in, or at least is accompanied by, the production of the mental image of a lion. The latter image perhaps takes the place momentarily of the man's image. And here the crucial point is reached, for here we leave psychology and go into semantics. We begin now to talk about metaphorical and literal *meanings* of terms; and here I part company with Father Boyle. He says that we should next say that the man is *literally* a lion, while admitting at the same time that such an assertion is self-contradictory in reality. In my opinion, what we do is to notice the resemblance between this man, as given in our sense-image of him, and a lion, as given in our memory-image of a lion. In virtue of this resemblance between them we give them the same name, "lion," since the characteristic under discussion is thought of as being leonine rather than human. But we do not mean "lion" in the literal sense, otherwise we would leave the office with alacrity and phone the nearest zoo. We notice, rather, a certain general similarity of the man to the lion and thus widen the term's meaning to catch up, as it were, with

the wider similarity we have discovered. In other words, we use the term "lion" metaphorically. And we use it to describe the *one* human nature that the man has.

I might add that the above-mentioned psychological process is not at all restricted to cases of metaphor. It occurs in *all* cases of seeing similarities between things. Otherwise how would we ever manage to see things as similar to one another? If I see, for example, a chair in my friend's room which is the exact replica of one of my own chairs, the sense-image of his chair will serve to call up a memory-image of my own chair. I would then say that they are exactly alike—just as, in our metaphor, we thought of the man and of lions as being partly alike. In both cases the same general principles of comparison are used; and in neither case does the hypothesis of a two-natured being have to be made.

Though he denies flatly that St. Thomas, as he reads him, says that things are "similar in *being*, considered absolutely," Father Boyle nevertheless admits that,

if beings are similar in being, then God is certainly similar to other beings. . . . If being is a common perfection by which things are similar, it follows quite logically that the Cause of this perfection must be like the perfections that He causes.

Now, in reply to Father Boyle, if we consult St. Thomas we read that "existence is therefore found common to all things."<sup>1</sup> "*Being* is said of everything that is . . . it is not said of many equivocally, but analogically"<sup>2</sup>; ". . . according to some sort of analogy, as existence is common to all."<sup>3</sup> So, for St. Thomas, "existence" is common to all things, and it is asserted of them analogically (another point which Father Boyle denies). So now, presumably, Father Boyle, who has already charted the course, will accompany me, and together we will "inevitably steer towards this terrible reef." Yet he need not be discouraged. St. Thomas made the journey before us and survived with distinction. The *Summa contra Gentiles*

<sup>1</sup>" . . . ergo esse inveniatur omnibus rebus commune . . ." (*De Pot.*, q. 3, a. 5, resp.; cf. *ibid.*, a. 6, resp.).

<sup>2</sup>"*Esse* autem dicitur de omni eo quod est. . . non enim de multis aequivoce dicitur, sed per analogiam . . ." (*CG*, II, cap. 15).

<sup>3</sup>" . . . secundum aliqualem analogiam; sicut ipsum esse est commune omnibus" (*ST*, I, q. 4, a. 3, resp.).

<sup>4</sup>" . . . agens et factum oporteat sibi esse similia . . ." (*CG*, II, cap. 20).

<sup>5</sup>" . . . agens primum et universale,

quod Deus est . . ." (*ibid.*, cap. 21).

<sup>6</sup>"Sed essentia Dei est perfecta similitudo omnium, quantum ad omnia quae in rebus inveniuntur, sicut universale principium" (*ST*, I, q. 84, a. 2 ad 3).

<sup>7</sup>" . . . alia autem a se videt non in ipsis, sed in seipso, inquantum essentia sua continet similitudinem aliorum ab ipso" (*ibid.*, q. 14, a. 5, resp.).

<sup>8</sup>Cf. also *ibid.*, q. 4, a. 3 ad 3 as supporting Father Boyle's quotation from *De Ver.*, q. 2, a. 11 ad 1.



tells us that "agent and effect must needs be like each other"<sup>4</sup> and also that God is the first and universal agent.<sup>5</sup> In the *Summa Theologiæ* we read that "the Divine Essence is a perfect likeness of all, whatsoever may be found to exist in things, being the universal principle of all"<sup>6</sup> and that God "sees other things not in themselves, but in Himself; inasmuch as His essence contains the similitudes of things other than Himself."<sup>7</sup> So, to employ Father Boyle's vigorous phraseology, "it must follow as the night the day that God is like creatures."

When in interpreting the Pseudo-Dionysius<sup>8</sup>—not always the easiest of tasks—St. Thomas denies that God is similar to creatures, he is referring to the similarity which a copy or effect has to its model or cause. But when he affirms the mutual similarity of any cause to its effect, and of God to creatures, St. Thomas is using the word in a causally neutral sense, as when we say that X is similar to Y and leave aside the question of which is causally or ontologically prior. In the first case the converse of the proposition is false. In the second, however, it is true. There is the risk, of course, of having this explanation treated as another piece of Humpty Dumptiana. But it seems preferable to saying that St. Thomas openly contradicts himself in a most fundamental part of his metaphysics.

## BOOK REVIEWS

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VERNON J. BOURKE, *Saint Louis University*

*Dialectique de l'agir.* By André Marc, S.J. Paris-Lyon, Emmanuel Vitte [1954]. Pp. 585.

*The Value Judgement.* By W. D. Lamont. New York: Philosophical Lib., 1955. Pp. xv + 335.

Contemporary ethical literature has become extremely diversified, as these two books clearly show. Both authors intend to make a general approach to ethics, but they have not read the same things and do not see their subject in the same light. Contemporary writing figures prominently in each work; yet, if we except Kant, no modern ethicist cited in one book is even mentioned in the other.

Father Marc's work brings to a conclusion a series of studies including his *Psychologie réflexive* and his *Dialectique de l'affirmation*. He is a French Thomist, well read in the literature of Continental existentialism and phenomenology. The present book gives a philosophical formulation of certain classic views in Thomistic moral theory under three general headings: finality, moral obligation, and the moral person. Marc's method consists in making a confrontation of contemporary French ethical positions and the traditional Scholastic views. It is as if A.-D. Sertillanges were to discuss these major topics with René Le Senne. In the course of this dialectic, Marc continually develops and expands his own notions of what modern Thomism means today. His views on the end of human activity, the nature of final beatitude, the certainty of the existence of God, the absolute distinction between good and evil, the intellectual-voluntary character of duty, and the workings of moral conscience are sound and well expressed. The discussion is controlled by a man alert to the facts of human experience, aware of the difficulties inherent in human desire and action, but all the while serenely sure of his metaphysics.

Since the question of moral values is paramount in the second book under review, let us note what Father Marc does with it. Le Senne is quoted (p. 79) as saying that "the word value denotes the interiority of the relation between the Absolute . . . and this or that personal consciousness." Accepting this, Marc adds that, though values are sometimes unreal, yet

when they do become factual, they are more real than those which remain as pure ideals. Moreover, he insists that, when values are realized, they are not thereby destroyed or annihilated but become more actual.

Professor Lamont is inalterably opposed to the above conclusion. (Incidentally, he is not Corliss Lamont the American humanist but a professor at the University of Glasgow.) Looking back over more than fifty years of British moral philosophy, Lamont is impressed (as most readers of this literature will be) by its present condition of stalemate. One stubborn group of British ethicists say that moral values are real and objective; they claim that they can see the difference between the morally good and bad almost as directly as one can see the distinction between yellow and red. Another equally firm school of moral writers in England identifies moral values with subjective approvals or disapprovals of any state of affairs. Neither side will concede the match.

A new approach is attempted by Lamont. He suggests that the act of valuation be studied, using the techniques of present-day economics. In disarming fashion, he admits that he is no expert in economics, but he has studied the subject and sought advice from those who know it. What he intends to offer is a general theory of valuing with some suggestions as to its application to ethics. He does not claim that value judgment and ethical judgment are identical.

The argument of Lamont's book is organized under twenty-two "propositions," much like Scholastic theses. It is difficult to summarize so many conclusions; consequently, I offer a sampling of the first four propositions.

Valuation is always relative or comparative, never absolute or simply positive. Value is attributed to the non-existent, never to the existent.

Value is measured in terms of opportunity cost. Value is measured in terms of anticipated, not actually incurred, cost.

The economic notion of "opportunity cost" is explained as "that content of demand which is renounced when, confronted by the necessity of choosing between alternatives, a demander chooses one and renounces the other." Thus the value of an objective is set by what one will give up in order to attain it.

It will be seen that this economics-inspired theory of valuation leads to conclusions quite opposed to those of Father Marc. Crudely expressed, this opposition amounts to this: for Lamont, heaven is desirable only before you get there; for Marc, heaven is imperfectly desirable before you get there, perfectly so after you get there. Many profitable insights are to be found in Lamont's book. He does try to find a mean between crude objectivism and uncontrolled subjectivism. Yet his psychology of cognitive,

conative, and effective activities looks strangely outmoded. One noteworthy feature of the work is a reinstatement of teleology in ethical discussion. Lamont even searches for some absolute ground for moral judgement—and comes up with something very much like Kant's autonomy of the person. It would be interesting to see what Father Marc could do, dialectically, with this sort of British ethics.

JOHN J. FITZGERALD, *University of Notre Dame*

*The Material Logic of John of St. Thomas: Basic Treatises.* Trans. Yves R. Simon, John J. Glanville, G. Donald Hollenhorst; with a preface by Jacques Maritain. Chicago: Univ. of Chicago Press, 1955. Pp. xxxiv + 638. \$10.00.

In the preface to this perceptive translation of the *Logical Art* of John Poinsot (1589-1644), the seventeenth-century Dominican called John of St. Thomas, Jacques Maritain has written:

The *Logical Art* of John of St. Thomas is in several respects the masterpiece of Aristotelian logic; yet, it includes issues that Aristotle hardly touched upon. In the context of John of St. Thomas, issues not treated by Aristotle never look un-Aristotelian; quite naturally the system of logic founded by Aristotle takes over truths contributed by the Stoics and other philosophers, by grammarians and by Theologians. At a time when the state of logical studies obviously calls for an ample process of integration, the work of John of St. Thomas demonstrates, in the most encouraging fashion, the integrative power of Aristotelian logic (p. vii).

Perhaps no contemporary is closer to the inspiration and thought of this seventeenth-century thinker than Maritain who, in *The Degrees of Knowledge*, has used his capital distinction between the objective and formal concept to correct and assimilate the authentic insight of Descartes, and again, in *The Philosophy of Nature*, has used his formulation of the doctrine of subalternation as an essential factor in the assimilation of the originalities of modern scientific types into the classical Aristotelian-Thomist theory of science.

In the same spirit and with some of the same insight-in-depth into the thought of John of St. Thomas on the philosophy of logic, Professor Simon fixes, in terms of the traditional Scholastic distinction between formal and material logic, the contemporary relevance of these logical treatises:



No part or function of logic will ever decide whether a particular proposition, relative to the real world, is true or not. But logic may be able to say what general conditions an argumentation must satisfy in order to be not only consistent, i.e., formally perfect, but also demonstrative. *Material logic* is a possibility if and only if some second intentions are so constituted that their laws be the rules of scientific demonstrations (p. xi).

Thus, from the outset, the authors of this translation have suggested the philosophical and historical setting indispensable to the understanding of the order and import of the translated treatises: the object and nature of logic, on the universal, antepredicamental inquiries—on unity of meaning, on the categories, on demonstration and science.

The vexed issue of those second intentions, which, in the thought of John of St. Thomas, constitute the proper subject matter of “posterioristic analysis or material logic” as distinguished from “prioristic analysis or formal logic,” is decisively elaborated in the context of a firmly resolved concept of philosophical science, unfronted by, and so uncomplicated with, the unresolved logical and methodological problematics of modern mathematical-physical science. This would seem to be the sense in which one must take Professor Simon’s remark: “Both with regard to language and to *Problematik*, John of St. Thomas remains a scholastic. In spite of his chronology, Galileo and Descartes are unknown to him. His uneventful life was, for the most part, spent closed to the great scientific novelties of the Renaissance” (p. xix).

Prescinding from the historical solidity of this remark, it does convey the basic strength and relative weakness of these masterly logical treatises. Their strength consists in a philosophy of logic deriving from a historically matured and substantially complete philosophical science which—and this is their inevitable weakness—embodied the unrecognized or imperfectly recognized problematic and methodology of the nonphilosophical physical sciences. Since the clear discernment and formulation of the epistemological and logical constants of a specific science usually come late in its historical development, one might expect those peaks and dips exhibited in the historical development of logical studies to which Father Bochenski likes to refer. One might further expect such peaks in logical studies to follow the peaks in the development of the sciences which nurture them. Thus, the excellence and perennial relevance of the works of John of St. Thomas would seem to be premised on the assimilation of the Aristotelian philosophy in its fullest development to date; a confining and compelling task which would, in fact, seem to exclude any serious preoccupation with the scientific

originalities of the Renaissance.

Viewed in these perspectives, the translation of Professors Simon, Glanville, and Hollenhorst stands forth, alike in its doctrinal density as in its refreshingly literate rendition for the most part into contemporary English idiom, as an indispensable basic contribution to contemporary philosophic literature at both the philosophical and historical levels. One could hope that these intrinsic merits will incline them and others, of equal competence, to advance still further this important task of rendering into readable idiom the remaining master works of the Aristotelian-Thomist tradition.

VERNON J. BOURKE, *Saint Louis University*

*Imprudence in St. Thomas Aquinas.* By Charles J. O'Neil. Milwaukee: Marquette Univ. Press, 1955. Pp. 165. \$2.00.

*The Truth That Frees.* By Gerard Smith, s.J. Milwaukee: Marquette Univ. Press, 1956. Pp. 79. \$2.00.

These are the "Aquinas Lectures" of the past two years. Fittingly enough, in this period in which Marquette University has celebrated its seventy-fifth anniversary, both talks were given by members of its own faculty. This excellent lecture series continues to make an important contribution to St. Thomas in America.

Professor O'Neil returns to a theme on which he has done much scholarly work, the nature of prudence. Here, his approach is from the contrary, the vice of imprudence. He first shows why imprudence is not adequately treated in the *Nicomachean Ethics*; it has no place in Aristotle's moral science. Nothing better demonstrates the advances made by Aquinas as a philosopher than the way in which he saw the reality of the vice of imprudence. People do acquire defective habits of reasoning about moral matters, and this lecture explains why that is so. Besides its primary interest to moralists, this study has a direct value for political philosophers. It offers a thoughtful criticism of Jaffa's book on the relation between Aristotelian and Thomistic political philosophy. The possibility of political imprudence is the key to an understanding of the two positions. It would seem an opportune time, now, for a full-scale reappraisal of the political philosophy of Aquinas. Professor O'Neil could do it.

Father Smith has fitted his lecture into the general theme of the anniversary programs at Marquette, which was "The Pursuit of Truth to Make Men Free." He directs his attention to the fundamental problem of the relation of freedom to truth. His lecture has an almost deceptive simplicity.

Ten words are rarely used where one will do. In an age of repetition and redundancy, this technique requires a bit of adjustment in the mental processes of the reader. We are told how *good knowledge* plus *good use of knowledge* combine to make men free. But freedom is usually taken as an absolute, as an intuited value, in contemporary discussions. It will take some repetition to get most people to think otherwise. Father Smith's argument and its artless examples are impossible to summarize. (So, it is startling to find an explanation which depends on our understanding the inability of babies to spit straight. Indeed, as a father in the irreligious sense, with wet memories of feeding babies in high chairs, I should be inclined to deny the validity of the example.) The whole lecture has to be read carefully and meditated, for Father Smith says that the key to the good life lies in abandoning ourselves to that highest knowledge which is the love of God. It seems like a very simple proposition. If I may end with a Smithic comment, it is not.

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